

Chapter 4

PETROLEUM SUPPLY COMPANY

Section I. THE COMPANY

MISSION

The mission of the petroleum supply company is to receive, store, and transfer bulk petroleum to divisional and nondivisional units. The company can—

- Establish and operate no more than two temporary petroleum storage facilities.
- Lay, operate, and retrieve petroleum hose lines.
- Maintain a portion of the command bulk petroleum reserve stock.

CAPABILITIES

The company's capabilities are determined by the personnel strength levels prescribed in its TOE. The petroleum supply company, organized under TOE 10427, has the following capabilities.

Full Strength

At full strength (TOE Level 1) and operating on a 24-hour basis, this company can

- Establish and operate temporary bulk storage facilities. Storage capability is shown in Table 4-1, page 4-2.
- Receive and issue in any combination a total of 1.2 million gallons of bulk petroleum per day.
- Maintain a prescribed portion of the command reserve stock, up to 2,520,000 gallons.
- Establish and operate bulk Class III supply points at no more than two locations.
- Provide local delivery of 90,000 gallons of bulk petroleum fuel based on two trips per day with 75 percent availability of twelve 5,000-gallon tankers.
- Provide limited mobile filling station support.
- Lay approximately 24 kilometers (15 miles) of collapsible hose line in a day.
- Operate a Class III supply point by connecting into pipeline systems with the use of an emergency off-take point (EOP) kit.
- Operate Class III railheads and fixed Class III installations as required.

Strength Levels 2 and 3

Operational capabilities are reduced to about 90 percent for Level 2 and to 80 percent for Level 3. These TOE categories are established by AR 220-1.

Type B Organization

The capabilities of a Type B organization are the same as those of a Level 1 organization. There are some differences in personnel, however. A Type B organization requires fewer US military personnel. Vacancies in this type organization can be filled by non-US personnel. See Section II for information on using non-US labor. Interpreters and translators required under the Type B organization will be provided from appropriate teams available to the theater commander. Request assistance of these teams to provide additional capabilities. When authorized by the Department of the Army, authorization of US military personnel in the Type B organization may be modified as required by local area conditions of employment. Details on how to modify an existing TOE or MTOE are found in AR 310-49. ARs 71-31 and 71-13 will aid in developing the justification.

Table 4-1. Storage Capability (Gallons)

	Number of Collapsible Fabric Tanks 50,000-Gal	At 100% Availability	Number of Collapsible Fabric Tanks 20,000-Gal	At 100% Availability	Number of Collapsible Fabric Tanks 10,000-Gal	At 100% Availability	Totals
Per Company	36	1,800,000	24	480,000	48	480,000	2,760,000
Per Platoon	18	900,000	12	240,000	24	240,000	1,380,000
Per Supply Section	6	300,000	4	80,000	8	80,000	460,000

REQUIRED SUPPORT

This company is capable of operating independently when provided administrative, supply, and maintenance support from a higher headquarters or an adjacent unit. In some instances, supported units may provide this support in the absence of other sources. This petroleum supply company depends on—

- Appropriate elements of COSCOM or TA for religious, legal, health service, finance, and personnel and administrative services.
- Engineer fire fighting teams (TOEs 0510LA00 and L5510LB00) for required fire fighting support.
- Petroleum supply and operating teams (TOE 10560LA00 [petroleum base lab] and TOE 10560LC00 [petroleum mobile lab]) for petroleum laboratory quality surveillance assistance.
- Appropriate elements of the COSCOM/TAACOM or maintenance team described in TOE 43509L (DS) for maintenance support and services. (This team belongs to TOE 43209L00.)
- Transportation medium truck company (petroleum, oils, and lubricants [POL]) (TOE 55727 [COMMZ] or TOE 55728 [corps]) for distribution of bulk petroleum.
- Supplemental transportation assets for displacement of the unit.
- Additional security forces (attached or provided by the area commander) to protect isolated petroleum storage facilities from guerrilla activity, destruction, sabotage, and pilferage.

MOBILITY

The company's mobility is determined by the number of organic vehicles authorized and the amount of personnel, equipment, and supplies that must be moved. In order to achieve the flexibility and mobility needed to support combat units, the company stores the product in collapsible fabric tanks and modular fuel systems—both of which can be quickly installed and moved. Inside the theater of operations, this unit could deploy itself with additional support from corps transportation units.

ORGANIZATION

The organization of the company is designed to meet mission requirements in changing situations. The company may be located in the corps or COMMZ. The company is organized into a company headquarters, a supply control section, two supply platoons, and a maintenance section. (See Figure 4-1.)

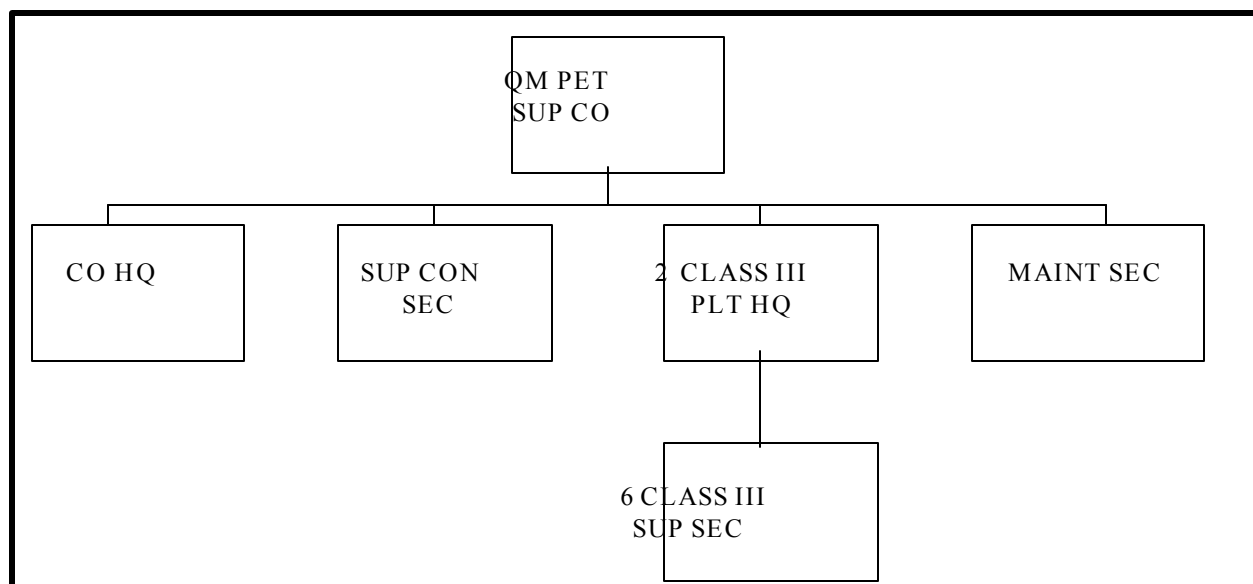


Figure 4-1. Organization of the Petroleum supply company

ASSIGNMENT

The company may be assigned to a COSCOM, a TAACOM, or a headquarters detachment petroleum group (TOE 10602). The petroleum supply company is normally attached to a headquarters and headquarters company of a petroleum supply battalion (TOE 10426). The company may be assigned to forward and rear CSGs. The group attaches the company or platoon to a CSB or a petroleum support battalion. Normally, a petroleum supply company cannot support more than one division slice of the corps. However, the size of the corps reserve affects actual allocation.

ALLOCATION

The allocation of the petroleum supply company varies according to its location and the situation. In the corps, there is one petroleum supply company for each mechanized or infantry division and one petroleum supply company per two airborne, air assault, or light infantry divisions or combinations thereof. For bulk petroleum in the COMMZ, there is one petroleum supply company per 1,244,588-gallon daily requirement or fraction thereof.

RESOURCES

Personnel and equipment are the major resources needed to run the company effectively.

Personnel

The Strength Level 1 column of TOE 10427 lists personnel needed to accomplish the mission during sustained combat operations. See Section II for detailed information on the duties of company headquarters personnel. Refer to Section V for duties of supply control section personnel, Section VI for Class III supply platoon personnel, and Section VII for maintenance section personnel.

Equipment

The company's ability to perform depends on the availability of authorized equipment. Refer to headquarters TOE-prescribed and mission-essential equipment. This chapter contains lists of TOE-prescribed equipment for the company headquarters, supply control section, supply platoons, and the maintenance section. The commander, platoon leaders, platoon sergeants, and section chiefs should refer to these lists when planning for operations. TOE 10427 lists the minimum equipment needed to perform the unit mission. Refer to AR 310-49, Chapter 3, for directions on how to request additional equipment that, because of tactical or environmental considerations, is not prescribed by TOE. Items of clothing and equipment, components of sets and kits, repair parts, tools, and expendable items are authorized by CTAs, TMs, and SBs.

Section II. COMPANY HEADQUARTERS

MISSION

Company headquarters personnel support the company elements and are responsible for the effectiveness of company operations. The headquarters provides command and control, administrative and logistical support, and tactical direction to the company elements. Headquarters personnel perform a variety of functions, which are explained in detail in various sections of this manual.

ORGANIZATION

Unit operations usually begin with the assignment of a mission by higher headquarters. The commander must prepare a plan to carry out the company mission. As part of the plan, he determines how to organize the headquarters to function smoothly and effectively and to use personnel and equipment in an efficient, mission-supportive manner. Figure 4-2 identifies TOE-prescribed personnel of the company headquarters and suggests a way to organize them for operations.

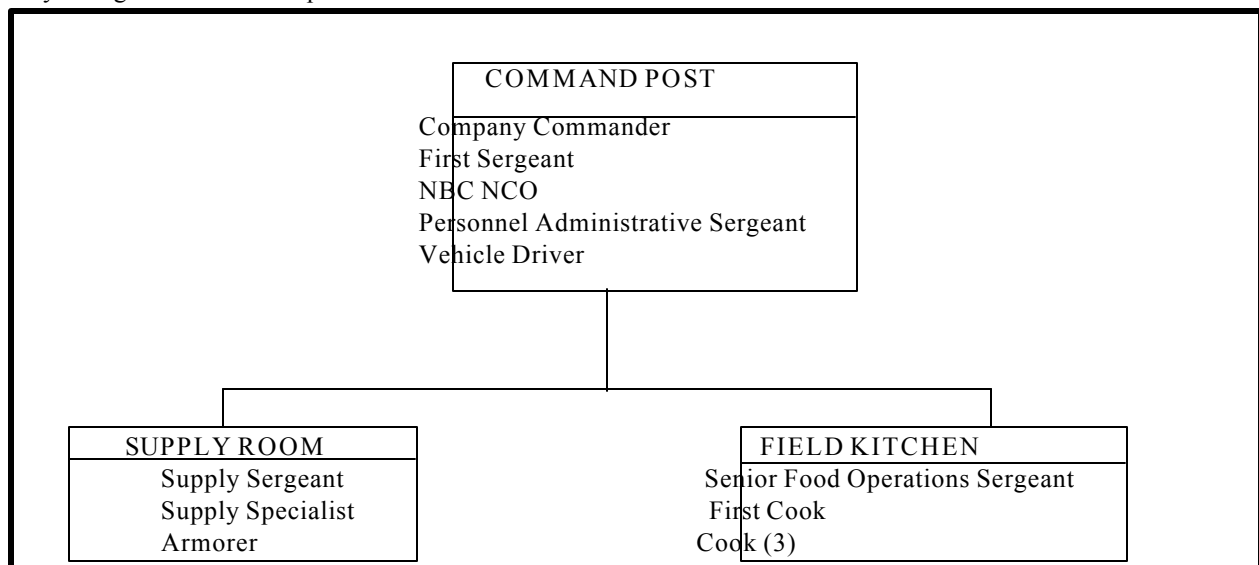


Figure 4-2. Organization of company headquarters personnel

PERSONNEL DUTIES

As Figure 4-2 shows, many headquarters personnel work in areas other than the command post. Table 4-2 details duties of company headquarters personnel.

Table 4-2. Duties of Company Headquarters Personnel

POSITION	SC/ MOS	SKILL LEVEL	GRADE	TOTAL	DUTIES
Company Commander	92F		CPT	1	Commands, directs, and supervises technical and support activities of mission operations. Responsible for unit readiness, site establishment, communications, defense, unit administration, food service, supply, maintenance, and training.
First Sergeant	77F	5M	E8	1	Serves as commander's primary noncommissioned assistant. Concerned with overall supervision of food service, administration, supply, communications, and area defense operations. In charge of the company during absence of all company officers. Manages the command post. Represents the company's enlisted personnel. Provides career development and counseling to enlisted soldiers.
NBC NCO	54B	3	E6	1	Serves as primary advisor to the company commander for all NBC matters. Assists the commander in planning and conducting NBC operations and advises the commander on the organization and training of the unit NBC teams. Schedules and supervises maintenance and employment of equipment. Computes radiation factors affecting personnel, equipment, and operations. Assists in preparation and analysis of NBC reports, records, maps, and sketches. Prepares radiological fallout and chemical and biological downwind predictions. Assists in analysis of chemical target vulnerability. Trains company personnel in protective measures to be taken during nuclear, biological, and chemical attacks or operations.
Personnel Administrative Sergeant	75B	2	E5	1	Performs clerical and administrative duties. Prepares SIDPERS change reports. Maintains duty rosters. Completes standard forms. Maintains suspense files and personnel data cards. Types reports, orders, and operating procedures. Posts and files correspondence, regulations, and changes to unit authorization documents.
Vehicle Driver	77F	1	E3	1	Drives 1-1/4-ton cargo truck provided for use by commander and company personnel. Performs vehicle operator's maintenance. Operates radio.

Table 4-2. Duties of Company Headquarters Personnel (Continued)

POSITION	SC/ MOS	SKILL LEVEL	GRADE	TOTAL	DUTIES
Supply Sergeant	92Y	3	E6	1	Prepares and maintains supply records. Provides locked facilities to safeguard supplies and property stored in unit supply room and other company storage areas. Processes unit laundry. Handles issue and turn-in of property between company and personnel. Assists personnel with supply matters. Requests, receives, and issues supplies. Prepares adjustment documents for property lost, damaged, or destroyed. Supervises armorer and supply specialist.
Supply Specialist	92Y	1	E3	1	Assists the supply sergeant. Requests, receives, stores, and issues authorized supplies and equipment needed for company operation.
Armorer	92Y	1	E4	1	Repairs and performs unit maintenance (excluding operator and crew) on unit small arms. Keeps weapon records (AR 710-2 and DA Pam 710-2-1). Performs duties assigned by the supply sergeant.
Senior Food Operations Sergeant	92G	4	E7	1	Supervises cooks assigned to the company. Selects field kitchen site. Prepares production schedules. Adjusts menus. Prepares food ration requests. Conducts daily meetings. Inspects food kitchen personnel. Supervises food preparation. Assigns duties. Inspects field kitchen. Prepares SOP for kitchen personnel, including instruction sheet for head counters. Instructs head counters. Inspects serving lines. Reports equipment shortages. Maintains informal equipment repair logbook.
First Cook	92G	2	E5	1	Supervises second-shift operations of field kitchen. Ensures that cooks follow menus. Inspects food storage and food preparation. Directs personnel in construction of grease traps, soakage pits, garbage pits, hand-washing devices, and incineration pits. Instructs head counters in duties. Prepares the more complex food items.
Cooks	92G	1	E4/3	3	Prepare, cook, and serve food according to recipes, cooking times, cooking temperatures, and field kitchen SOP. Clean work area, equipment, and cooking utensils. Receive, inspect, and store food items. Prepare assigned food items. Set up serving lines. Portion and serve food on serving lines or from food containers. Perform preventive maintenance on kitchen equipment.

OPERATIONS

A major function of company headquarters is to provide supervision and direction of the overall operation of the company. The commander and his staff must consider the following factors.

Command Post

The company headquarters works closely with higher headquarters and operating elements when selecting its operating area (refer to Chapter 6). It establishes the command post in a central location in the company area. Plans should include the possibility of setting up in a town or village as well as in the field.

- In the Field. The command post tent can be pitched by four soldiers in approximately 30 minutes. Detailed procedures for pitching and striking tents are in TM 10-8340-211-13. The tent, as well as headquarters vehicles, should then be camouflaged (see FM 20-3). Generators should be sandbagged to reduce noise.
- In Town or Village. The command post can be established in any existing building. Vehicles should be parked in a garage or barn or hidden beneath overhanging roof edges. If parked beneath roof edges, vehicles may be further hidden beneath camouflage nets or behind crates or boards.

Coordination

Upon arrival at a new site, the company headquarters informs higher headquarters that the move has been made and what time operations will begin. It reports location coordinates for both the command post and an alternate command post by messenger or other secure means. It confers with supervisory personnel about the administrative and operational condition of the company. If necessary, the company headquarters briefs higher headquarters on overall unit capability, stressing personnel strength and equipment availability.

Communications

The company headquarters ensures the telephone circuits and radio nets are operational. The wire party should be ready for use when the headquarters arrives at the new site (refer to Chapter 6, Sections I and II). Company personnel should enter the wire net as quickly as possible.

Defense

The company headquarters completes perimeter defense and camouflage (refer to Chapter 6, Section III). As soon as possible, it sends copies of the defense layout with overlays to higher headquarters, to the base cluster operations center, or to the base defense operations center, as appropriate. Overlays should show the specific location of all machine guns, mine fields, concertina wire, observation posts, and listening posts. The company headquarters supervises establishment of the company defense while subordinate elements prepare to occupy designated areas. It specifies the unit response to ground and air attacks, as well as camouflage activities once company elements have established defense and operating sites. Refer to STP 21-1-SMCT and FM 20-3 for camouflage details.

Maintenance

The company headquarters supervises operator maintenance once operators are assigned to equipment, and technical manuals, tools, and expendable supplies are available. It ensures that personnel perform all required operator maintenance according to appropriate technical manuals. All required entries and deficiencies should be recorded on equipment inspection and maintenance work sheets. It makes sure the need for maintenance above operator level is reported to the motor sergeant. Operator maintenance is covered in Section VII.

Support Functions

The company headquarters supervises sanitation operations once the field sanitation team is operational. It sets up a procedure for processing captured enemy personnel and materiel and coordinates unit first aid requirements. These activities are explained later in this section. Shortly after occupation of the bivouac area, it ensures all personnel are informed of the following:

- Location of field kitchen and time, method, and sequence of feeding.
- Laundry pickup schedule.
- Religious services schedule.
- Bath schedule.
- Time, place, and method of mail call.
- Location of medical treatment facility and time of sick call.
- Location of latrines.

SUPPLIES AND EQUIPMENT

Table 4-3 lists equipment identified for the company headquarters by TOE 10427. Other equipment may be authorized by CTA. Use CTA 50-900 for clothing and individual equipment and CTA 50-909 for field and garrison furnishings and equipment. (See equipment registers in Appendix A for equipment descriptions.) Expendable and durable supplies are listed in CTA 8-100 and CTA 50-970.

Table 4-3. Company Headquarters TOE-Prescribed Equipment List for TOE 10427

ITEM	QUANTITY
Accessory outfit, gasoline, field range: accommodates 50 soldiers	1
Alarm, chemical agent automatic: portable backpack	1
Burner unit, gasoline, field range outfit: with components	4
Camouflage screen support system: woodland/desert, plastic poles	15
Camouflage screen system: woodland lightweight, radar-scattering, without support system	15
Charger, radiac detector: PP-1578/PD	2
Electronic test set: TS-4348/UV	1
Installation kit: MK-2325/VRC for AN/VRC-87/88/90 in HMMWV	1
Installation kit: MK-2564/VRC-97	1
Heater, immersion, liquid fuel fired	4
Kitchen field trailer mounted: mounted on M103A3 trailer	1
Launcher, grenade, 40 mm	4
Light set, general illumination: 25 outlet	1
Machine gun, .50 caliber	2
Machine gun, 7.62 mm	4
Machine gun, grenade, 40 mm	3
Mask chemical, biological: M40	197
Mount, gun: ring caliber .50	2
Mount, gun: 40 mm MK-64	2
Mount tripod, machine gun, heavy caliber .50	5
Mount tripod, machine gun 7.62 mm	4
Night vision sight, crew-served weapon: AN/TVS-5	3
Night vision sight, individual-served weapon: AN/PVS-4	1
Pistol, 9 mm automatic	1
Radiac meter: IM-93/UD	3
Radiac set: AN/VDR-2	1
Radiac set AN/PDR-75	1

Table 4-3. Company Headquarters TOE-Prescribed Equipment List for TOE 10427 (Continued)

ITEM	QUANTITY
Radio set: AN/VRC-90A	1
Range outfit, field gasoline	2
Rifle, 5.56 mm	196
Speech security equipment, digital subscriber voice terminal: TSEC/KY-68	1
Terminal radiotelephone mobile subscriber: AN/VRC-97	1
Truck, utility: cargo/troop carrier, 1-1/4-ton 4X4 with equipment (HMMWV)	1
Tool kit, small arms repairman	1
Trailer, tank, water: 400-gallon, 1-1/2-ton with equipment	2
Truck, cargo: 2-1/2-ton 6X6 with equipment	2

ADMINISTRATIVE AND MORALE SERVICES

A personnel administration center (PAC) may be activated at a higher level of command and tasked to provide formal administrative support to the company. When this occurs, the commander retains responsibility for the readiness posture of the company and for ensuring that assigned soldiers are properly supported. The commander also retains responsibility for military justice and for informal administrative actions. The following paragraphs relate to a company tasked to perform its own administrative functions. The commander's key assistants in providing and maintaining company administrative and morale services are the first sergeant and the company clerk.

ADMINISTRATIVE MANAGEMENT

The company headquarters is responsible for developing administrative management procedures, using 340-series Army regulations for guidance. It plans for the following administrative management activities.

Reports

A report is an account or statement describing in detail an event, situation, or similar matter, usually resulting from observation or inquiry. A number of unit reports are required.

- **SIDPERS.** For a SIDPERS overview, see DA Pam 600-8-20. SIDPERS gives information helpful in managing people individually and collectively. However, SIDPERS works only if the company promptly reports personnel strength and organization change data. DA Pam 600-8-1 gives detailed procedures for preparing and submitting SIDPERS input reports. The personnel administrative sergeant should be accountable for prompt and accurate submission of change data, immediate resolutions of errors, and continuing maintenance of files and source data.

- **Conduct and Efficiency Ratings.** Along with other data, these ratings help determine eligibility for certain personnel actions, such as promotion, assignment, or award. They can also be used to determine the type of discharge a soldier will receive. Conduct ratings are based on demonstrated reliability, good moral influence, sobriety, and obedience. Efficiency ratings are based on job performance. All key personnel should be familiar with the enlisted rating system described in AR 600-200. See AR 623-105 for guidance on rating officers. All ratings must be fair and impartial.

- **Unit Status Report.** The unit status report produces information to help the Army manage its resources. The payoff is military readiness. The Army wants the company to have its authorized personnel on board, its authorized equipment available in working order, and its required supplies on hand. Additionally, the Army wants the company to do what it is supposed to do—turn out soldiers who assist the unit mission. See AR 220-1 for the company's reporting requirements.

- **Materiel Condition Status Report.** The company headquarters must be constantly aware of materiel readiness status in the petroleum supply company. This is done through a timely system of inspections and reports. The maintenance element supervisor completes DA Form 2406, following instructions in DA Pam 738-750, Appendix C. These reports should be carefully reviewed before forwarding to determine the readiness status of reportable equipment, reasons for shortcomings, and corrective actions needed.

Records

A record is an account in writing or similar means preserving the memory or knowledge of facts or events. A report becomes a record when it is filed or maintained in a repository indefinitely or for a specified time. An efficient, economical records management program will ensure the commander and supervisory and administrative staffs have needed information. Receipts should be issued for records, and they should be properly used, stored, dispatched, and (when no longer useful) destroyed. AR 25-1 governs records management activities and identifies other regulations dealing with the subject. Some of the records kept by the company headquarters are discussed here.

Plans, Orders, and Standing Operating Procedure (SOP). Plans and orders are based on those received from higher headquarters. Plans set forth a logical sequence of steps to be taken by each unit element in performance of the company's mission. Orders should fit each specific situation, not merely refer to a checklist or repeat the SOP. The company SOP is a written set of instructions that has the force of orders. The SOP sets forth routine or recurring matters. If prepared in detail and updated frequently, the SOP is an effective management and supervisory tool for clarifying duties and responsibilities and making information available to all. The purposes of an SOP are

- To reduce the number, length, and frequency of orders.
- To simplify the preparation and transmission of orders.
- To simplify operations.
- To relieve supervisors of the need to make repetitious decisions on routine work.
- To minimize confusion and errors.
- To provide an authoritative reference for answering questions on responsibilities and recurring matters.
- To ensure uniform practices and results.

If an SOP is to serve its purpose, the authority to grant departures from it must be restricted. However, it should not be so restrictive that it prevents subordinates from exercising judgment or initiative. An SOP may include information on one or more of the topics shown in Appendix B. Thus, a company may have one SOP that covers all details of unit operations, or it may have several SOPs (kitchen SOP, unit supply SOP, safety SOP), which, combined, make up the company SOP. The SOP should reflect the company's needs. Appendix B contains an outline for drawing up an SOP; FM 101-5 contains a format for a descriptive combat service support unit SOP. However, the unit should not be restricted by either of them.

Qualification Record. This record reflects duties performed and skills acquired by personnel. It is used to determine duty assignments and required training. Although this record may not be kept at company level, it should

be reviewed periodically. AR 600-200 has information on preparing and maintaining enlisted qualification records; AR 600-8-104 has information on officer qualification records.

Duty Roster. DA Form 6 publishes duty assignments and ensures their fair distribution. The first sergeant or the personnel administrative sergeant prepares and maintains this record. The first sergeant should periodically review the duty roster to make sure the personnel administrative sergeant is following directions and samples in AR 220-45.

Policy File. This record is not mandatory, but it can be helpful. It is used to summarize decisions, experiences, directives from higher headquarters, and other information affecting unit activities. The policies, which may be in the form of plans, directives, or brief notes, may include charts, maps, and tables.

Unit Journal. This record may be required by higher headquarters. If kept, it should be prepared daily. The unit journal should be an accurate, objective record of events, actions, and operations involving the company. It may include personal recollections of persons involved and information and suggestions helpful to similar units performing under similar conditions. The unit journal is, in effect, the unit history.

Environmental Records. Spill reports, spill cleanups, disposition of contaminated materials, inventory discrepancies, etc, must be maintained IAW federal and host nation agreements, policies, laws, and regulations.

Office Management

Office management concerns routine administrative matters occurring within the company command post or orderly room, such as correspondence, files, publications, mail, and the unit fund.

Correspondence. Usually the commander or first sergeant reviews each piece of correspondence. Before signing correspondence, he should check it for proper format, correctness, and accuracy. Personnel should be trained to prepare correspondence to standards in AR 25-50. Each piece of correspondence should be handled only once.

Files. Unit file procedures should be periodically surveyed to make sure they conform to guidance in ARs 340-2 and AR 25-400-2. Proper files management involves the following questions:

- Are files properly identified, labeled, and arranged?
- Are proper file numbers used?
- Are correct disposition instructions on the folder labels?
- Are disposable records destroyed at the end of retention periods?
- Are applicable records transferred to a holding area or records center?
- Are file personnel trained to use the Army Functional Files System and proper filing procedures?

Publications. Publications management involves requesting and posting publications and making them available to those who need them. To determine publication needs, the commander consults reference listings in applicable soldier training publications and Army training and evaluation program (ARTEP)/Army mission training plan (AMTP). DA Pam 25-30 lists technical manuals for equipment listed in the TOE. The reference list at the back of this manual identifies required publications that should be in your company library. Publications must be complete, current, and accessible to personnel who need them. Changes require prompt posting. DA Pam 25-30 should be scanned periodically to see if changes have been published or publications have been superseded or rescinded. See DA Pam 310-13 for posting information.

Mail. The purpose of mail services is to safeguard official and personal correspondence and to deliver mail quickly and correctly to addressees or to dispose of mail that cannot be delivered. The commander appoints a unit mail

supervisor, who oversees a unit mail clerk and an alternate mail clerk—both additional duties. See Table 4-4 for duties of unit mail personnel.

Table 4-4. Duties of Unit Mail Personnel

PERSON	RESPONSIBILITIES
Unit Mail Supervisor	Supervises unit mail clerks. Trains mail clerks. Makes sure mail is delivered promptly. Ensures collection hours are posted on mail boxes. Accounts for registered, insured, and certified mail. Inspects unit mail room. Reviews personnel locator directory for currency. Reviews postal records. Makes sure mail is treated properly. Immediately reports any known or suspected cases of loss, theft, destruction, or other mistreatment of mail to unit commander.
Unit Mail Clerk	Safeguards mail until delivery or other disposition. Ensures prompt delivery of mail. Assists and advises unit personnel on postal matters. Maintains personnel locator directory. Maintains mail records. May be held responsible for any loss brought about by improper handling of mail in his care. Appointed on DD Form 285.
Alternate Unit Mail Clerk	Takes charge of unit mail operations in absence of regular mail clerk. Appointed on DD Form 285.

Unit Fund Management

The primary source of unit fund income is a share of the profits from activities such as post exchanges and motion picture theaters. Other sources include proceeds from sales of unserviceable fund-owned property or serviceable fund-owned property sold to other nonappropriated funds. Also, the fund may receive income from savings accounts and investments in US government securities. A custodian (normally the commander), aided by a fund council, administers and supervises the unit fund.

- **Custodian.** The custodian receives, safeguards, disburses, and accounts for fund property and assets. Disbursements are made by check except for petty cash. Fund records are maintained according to AR 215-5. The custodian has financial responsibility for administration of the fund. The custodian may have to reimburse the fund for improper expenditures or for losses resulting from negligence or failure to comply with fund regulations.
- **Council.** The commander appoints the council, which consists of a custodian (as president) and at least two other unit commissioned or noncommissioned officers. The commander may appoint a specialist (E4 and above) when such appointments are approved by a higher commander. The council meets at least quarterly at the custodian's call. The custodian makes sure the proceedings are recorded and filed. The junior council member is usually the recorder.

Personnel Management

Personnel management means getting things done by soldiers. The ability to do this is a measure of the commander's success. Commanders should—

- **Establish objectives.** State in writing what they want to accomplish. Make sure objectives are obtainable. Make them known to their personnel in clear, realistic terms.
- **Motivate personnel.** Make them want to do their best as team leaders.
- **Communicate effectively.** Express themselves clearly and concisely. Make sure they say what they want their personnel to hear. Be good listeners.
- **Be innovative.** Find new and better solutions to problems. Encourage personnel to offer suggestions. If suggestions are used, they reward and recognize their personnel.

- Maintain cooperation. Use their skills to develop and sustain a spirit of teamwork within the unit.
- Develop subordinates. Assess subordinates' skills and abilities and determine the best training for their professional development. Encourage subordinates to take advantage of opportunities for career development.
- Keep abreast of personnel management trends. Participate in personnel management training sessions.

Personnel Actions

Personnel actions put personnel management principles into effect. Actions include assignment, promotion, reduction of personnel, and recommendations for awards, decorations, and commendations.

- Assignment. As a rule, personnel should be assigned according to MOS. The commander puts the right person in the right job. The commander takes the time to know what each person can do and assigns worthwhile and constructive tasks. Rotating assignments should be considered to allow for professional development as well as reassigning personnel to make better use of their skills or for reasons of health, morale, or safety.
- Promotion and Reduction. The commander's authority to promote or reduce enlisted personnel is explained in AR 600-200. Care should be taken in performing these actions. They can help or harm company morale and efficiency. The commander should be prudent in making or recommending promotions. Promotions should never be automatic or based on partiality. Commanders ensure their personnel know the qualifications and requirements for the next higher grade and encourage them to prepare for more responsible positions.
- Awards, Decorations, and Commendations. Commanders may recommend personnel for awards decorations, and commendations. See AR 600-8-22 for details. Recommendations are submitted to higher headquarters. Commanders also award letters of commendation for outstanding job performance and make sure copies of letters are placed in the individuals' personnel files.

Replacements

Replacements come to the company from higher headquarters. Personnel replacement is based on unit strength reports provided to the higher headquarters SIDPERS element. In-processing procedures can help shape new replacements' attitudes. Chapter 7 of FM 22-101 has guidance on reception and integration of new unit members. The higher headquarters S1 will normally advise where to put replacements for their best use. However, the personal desires of replacements should be considered when possible. The commander and first sergeant should meet all replacements as they arrive. The commander or the first sergeant should interview them to make sure they have what they need and understand the company's organization and mission. Replacements should be assigned sponsors to help them in-process. Then they should meet their supervisors and start their jobs.

Enemy Personnel and Materiel

Procedures prescribed for handling captured enemy personnel are in FM 19-40. FM 27-10 contains additional information, outlining how the Geneva and Hague Conventions apply.

Non-US Labor

Non-US personnel may fill vacancies. Host nation personnel may be used in any capacity except handling remains. Refer to DA Pam 690-80 and FM 41-10 for guidance on obtaining and employing non-US labor. The number of non-US personnel must be determined by higher headquarters and will depend on the capacity of available personnel, the number of shifts, and local conditions. The term "non-US labor" may include native personnel, refugees, evacuees, displaced persons, and prisoners of war. If prisoners of war are used, they may not be assigned to any dangerous or purely military activity. Training, supervision, and security need to be considered in using non-US labor.

- **Training.** Training may be necessary before non-US labor can operate effectively. Training should be in line with standard procedures that take into consideration cultural, language, and economic differences between non-US labor and US forces.
- **Supervision.** Normally, military personnel supervise non-US labor. In some areas, where close supervision is possible, local civilian supervisors may be used.
- **Security.** The use of non-US labor must not endanger the security of military forces and operations. All non-US personnel must have proper identification. Precautions must be taken to prevent pilferage of military goods.

MORALE SERVICES

Morale services assist the commander in maintaining a high level of morale in the unit. Also, they help protect the physical and psychological health of troops.

Safety

Injuries and accidents can seriously affect the company, possibly resulting in a drop in unit readiness. To prevent this, the commander must devise a safety program that works and that covers all aspects of company operations (see DA Pam 385-1). Soldiers must be thoroughly trained in the proper handling of material and the precautions to take when handling or storing dangerous items. All safety rules and practices must be followed without exception. Additionally, everyone should be impressed with the importance of staying alert to detect potential hazards, taking corrective action to reduce or eliminate dangers, and promptly reporting all accidents and safety hazards. The company's safety program should emphasize safety requirements for all its operations. The safety SOP should describe the program; requirements for specific operations should be covered in other SOPs. Also, personnel need training in all aspects of the safety program. Soldiers should be aware of all safety hazards associated with their work and must practice safety precautions daily. Commanders have to work at achieving safety. Following are principles of accident prevention.

- **Active Interest.** Safety should be emphasized at all times in all company activities. Safety programs succeed when everyone participates and keeps up an active interest. Commanders should appeal to personal pride, pointing out each individual's responsibilities in the program. They should ask for and carefully consider suggestions for making operations safe. Credit needs to be given where credit is due; the successful suggester (and the rest of the company) should know if an idea has been adopted. On the other hand, if a suggestion is not adopted, the suggester should know why. Supervisors should be interested in what the accident rate does to efficiency. Supervisory interest can be maintained by providing facts and figures that show how accidents can affect company productivity and, conversely, how increased demands for productivity can increase accidents.
- **Fact Finding.** When an accident occurs, the commander should get the facts. What happened? How did it happen? Was anyone hurt? Was anything damaged? When and where did the accident take place? How serious was it? The answers to these questions should answer the most important question of all: why did the accident happen? Fact finding should focus on any act connected with the accident and why the act took place. Also, any mechanical failure or physical hazard should be checked. If a tool or piece of equipment contributed to the accident, was an improper item used? Was it used properly? Was the item defective?
- **Corrective Action.** Facts gathered on safety, accidents in the unit, personnel injuries, and equipment damage are used to come up with a workable pattern of corrective action. Requirements go beyond basic accident reporting. Near accidents must also be reported, giving all available information, so that steps can be taken to eliminate hazards, unsafe procedures, or unsafe conditions. Also, anything that constitutes a threat to safety should be reported so that corrective action can be taken. If soldiers are repeated accident victims, they should be considered for assignments in which they are less likely to endanger themselves and others.

Field Sanitation

Disease can significantly impact the unit's ability to perform its mission. Proper sanitation practices are crucial. The commander's responsibility for sanitation includes training soldiers in preventive medicine, providing necessary sanitation equipment and supplies, and establishing and enforcing sanitation procedures. AR 40-5 directs the commander to set up and train a unit field sanitation team. After the team is operational, the commander supervises field sanitation operations, ensuring that proper sanitation procedures are followed and that standards comply with Army regulations. For more information on field sanitation operations, see FM 21-10 and AR 40-5, Chapter 15.

Health Services

The commander coordinates with higher headquarters for health service support, ensuring that it is available during operations and plans for emergency medical treatment to be available during day-to-day operations. His responsibility also includes providing for the training of all unit members in self-aid/buddy-aid (first aid) procedures. To survive on the integrated battlefield, each soldier must be proficient in first aid. See FM 21-11 for more information on first aid procedures. When a soldier goes on sick call, DD Form 689 serves as a link between the commander and the medical or dental officer. Normally, the first sergeant or personnel administrative sergeant prepares the form for the sick or injured person, who takes it to the medical facility. The commander learns the disposition of the individual's case when medical personnel return the sick slip to him. In emergencies the sick slip may be initiated at the medical facility. The sick slip is not a permanent record. After it has served its purpose, the slip may be destroyed, except when it must be forwarded to an officer exercising special court-martial jurisdiction in a line-of-duty investigation. Sick slips should be prepared according to AR 600-6. DD Form 689 is not used during maneuvers or in theater of war operations.

Shower, Laundry, and Clothing Repair

In the field troops will require periodic shower service and exchange of clothing. The commander coordinates with higher headquarters to make certain the company is scheduled for service by the SLCR section operating in the area. The SLCR section may also provide delousing operations supervised by medical personnel.

Mortuary Affairs

The company is responsible for searching for, recovering, and evacuating remains. Search involves going into the casualty area and collecting remains. Recovery involves identifying remains, recording all equipment and personal effects found with remains, and sketching the recovery site. Evacuation is the movement of remains from the recovery site to the nearest mortuary affairs collection point. Under some circumstances, the unit may have to bury remains. Emergency burial of remains should only be performed when the tactical situation does not allow evacuation or when remains are NBC-contaminated. If remains are contaminated, personnel should mark the burial site with the correct NBC marker. The commander, officers, and NCOs should be familiar with the information in JTTP 4-06.

Personal Financial Management

The commander should be concerned with the finances of soldiers and their families. Good money management can contribute to individual and unit morale. The commander should designate individuals in the company as financial counselors and set aside time for them to counsel troops. Each unit member should have a copy of TC 21-7. The practical exercises in Chapter 7 of the training circular can be used to set up personal financial management training.

TRAINING

Effective training must be available for all administrative and morale services. See Chapter 7 for more information on managing training and securing training materials.

Section III. UNIT SUPPLY

MISSION

The company supply element supports the mission elements of the company with certain supplies and TOE equipment. The supply sergeant is responsible to the company commander for internal supply operations. The most important supply publications are found in the Unit Supply UPDATE. The company's MTOE is also needed.

Required Information

To manage unit supply operations, the supply sergeant must know the—

- Requirements and authorization of the company.
- The company commander's desires regarding unit supply.
- Size and physical characteristics of the unit supply element.
- Location and layout of the supply element.
- Type and amount of support needed to run the element.
- Number, type, and particular needs of soldiers in the company.
- Impact of company operations on internal supply operations.
- Location of each supply support activity furnishing support.
- Availability of environmentally safer products as alternatives to existing products.

Unit Supply SOP

The supply sergeant develops a company supply SOP. The SOP may be separate or a part of the company SOP; it should include the following:

- Responsibilities of unit supply personnel.
- Hours of operation of the supply room.
- Procedures for securing the supply room or tent.
- Procedures for controlling durable items.
- Measures for control of property issued to personnel.
- Procedures for controlling expendable items.
- Kinds of records, reports, and forms required.
- Detailed procedures for requesting, receiving, storing, inventorying, issuing, and turning in supplies.
- Procedures for initiating adjustment action for lost, damaged, or destroyed items.
- Procedures for safekeeping property of absentees.

- Guidelines and directions for maintenance of equipment and supplies.
- Procedures for laundry service.
- Safety precautions, including procedures on risk management, hazard analysis, safety standards in the unit, and fire and other emergencies.
- Information on supply training.
- Tables of measurement equivalents.
- Procedures for operating in an NBC environment.
- Procedures for automation security.
- A continuity plan.

Responsibility

Property responsibility is the obligation to ensure that government property entrusted to a person's possession, command, or supervision is properly used, cared for, and provided proper custody and safekeeping. Although the supply sergeant, assisted by the armorer and supply specialist, runs the unit supply element, all soldiers have certain responsibilities for property. AR 710-2 requires that someone be assigned direct responsibility for each nonexpendable and durable item on hand in the unit. When the property is issued on a hand receipt, direct responsibility for it is established. This direct responsibility is in addition to the command responsibility. These direct responsibilities may be supervisory or personal in nature. See ARs 710-2 and 735-5 for property responsibilities of the company commander, supervisors, and hand receipt holders.

Accountability

Accountability is the obligation of a designated person to keep an accurate record of property. The accountable person may be the company commander or a unit supply officer appointed by the commander. The person with property accountability must—

- Ensure that all property is correctly posted to property records.
- Know what is actually on hand through physical inventories.
- Take action to resolve shortages or overages.

SETUP AND CLOSEDOWN

For a unit supply element housed in a building, FM 10-14, Chapter 7, provides layout information. In the field, though, buildings are seldom available and the supply element will depend on tents.

Setup

To set up the supply element in the field, the supply sergeant needs to—

- Develop a layout plan (Figure 4-3, page 4-18)
- Pitch the supply tent.

- Camouflage the supply tent.
- Off-load and position supplies.
- Man and secure the supply tent.

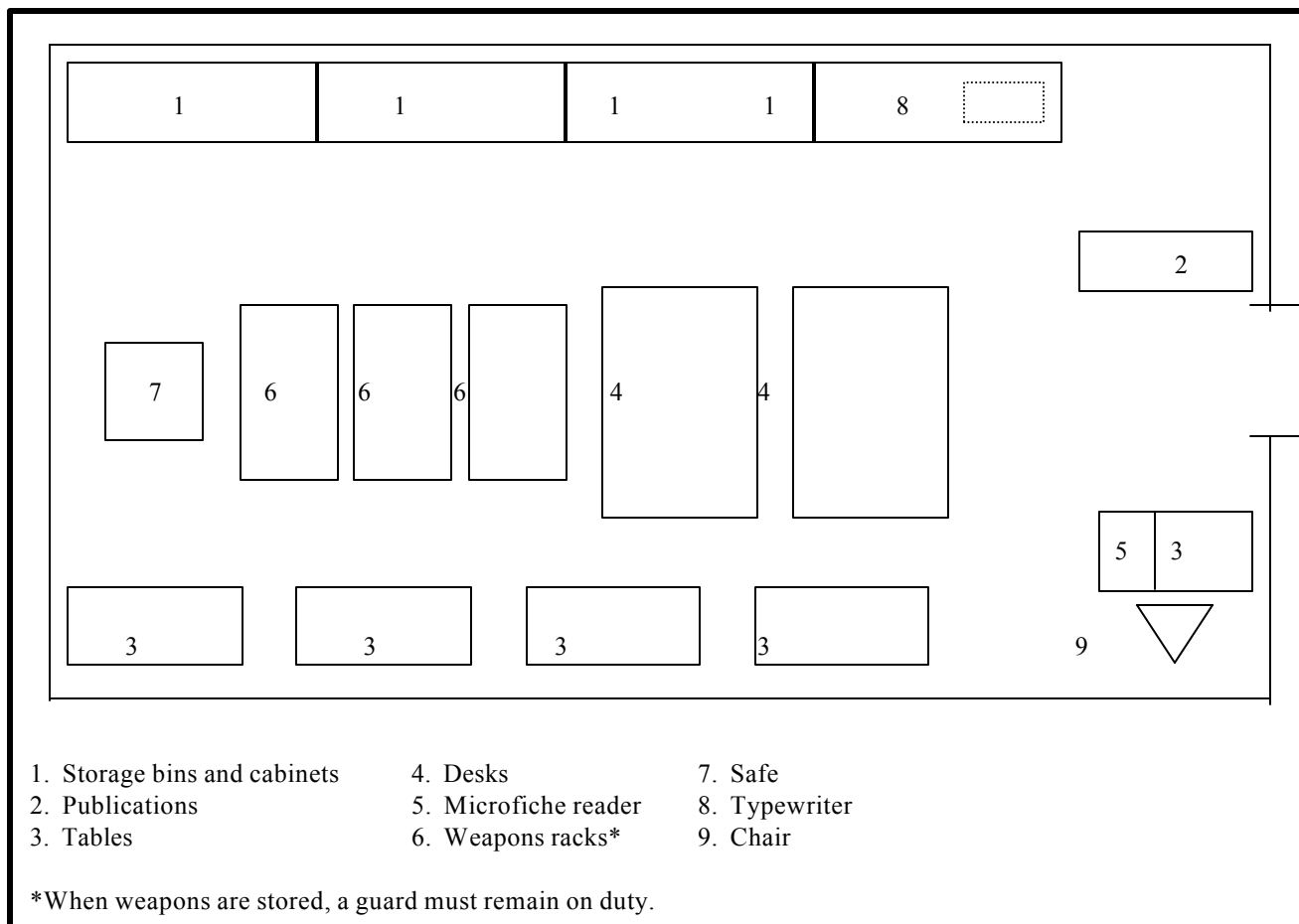


Figure 4-3. Sample Layout Plan in a Medium GP Tent

Preparation for Movement

When the company has to move, the commander will issue a warning order telling the supply sergeant when to close down supply operations and prepare for movement. The answers to the following questions will help plan the move:

- By what date must the company be ready to move?
- What types of operations are expected?
- What is the latest information on the location of threat forces and equipment?
- How many soldiers will move to the new area? Will some soldiers continue to operate at the old area?
- When will equipment be deployed?

- Does the company need any special equipment for operations?
- Is special maintenance required for equipment before or on arrival in the new area?
- Will more soldiers or details be necessary to perform the unit supply mission?
- How will contaminated supplies be handled?

Closedown

The commander will tell the supply sergeant when it is time to move. After receiving the order to close down, the supply sergeant—

- Sets up issue and cutoff times for supported activities.
- Loads supplies and office equipment
- Strikes the supply tent.
- Secures the basic ammunition load

SUPPLY OPERATIONS

The supply sergeant requests, receives, stores, protects, inventories, issues, and turns in supplies. He may also have to obtain laundry support for the company.

Requests

See Table 4-5 for authorization documents which list items that may be requested. A consolidated company request is prepared and sent to the battalion S4. See Table 4-6, page 4-20, for request and turn-in forms. The request should be checked for accuracy and completeness before it leaves the company. The supply sergeant initiates follow-up action if supplies are not received on schedule and periodically reviews the current need for requested supplies. See DA Pam 710-2-1, Chapter 2, for details.

Table 4-5. Authorization Documents for Property

TYPE OF PROPERTY	AUTHORIZATION DOCUMENT
Organization Property	MTOE CTA 50-900, Section II CTA 50-909, Appendix C TDA Joint Table of Allowance AR 840-10
Installation Property	CTA 50-909
Expendable Supplies Repair Parts	Technical manuals containing repair parts and special tool lists
Other Expendables	CTA 8-100 (medical) CTA 50-970 (all except medical, ammunition, repair parts, and heraldic items)
Personal Clothing	CTA 50-900

Table 4-6. Requests and Turn-In Forms

FORM	USED TO REQUEST OR TURN IN
------	----------------------------

DA Form 581 (Request for Issue and Turn-in of Ammunition)	Ammunition and explosives.
DA Forms 2765 and 2765-1 (Request for Issue or Turn-In)	Expendable, durable, or nonexpendable single line item with NSN listed in the AMDF.
DA Forms 3161 (Request for Issue or Turn-In) and 3161-1 (Request for Issue and Turn-In [Continuation Sheet])	Ten or more line items of expendable supplies normally provided by self-service supply center. Five or more line items of packaged Class III products or other supplies normally ordered on a recurring basis.
DD Form 1348-6 (DOD's Single Line Item Requisition System Document [Manual Long Form])	Non-NSN single line item. NSN single line item when the NSN is not listed in the AMDF. Modification work order and modification kit. Classified item. Any exception data item.
See DA Pam 710-2-1, Chapters 2 and 3, and FM 9-13, Chapter 8, for preparation directions	

Receipts

The commander uses DA Form 1687 to designate those authorized to sign for supplies. This form is sent to the support activity. The commander remains fully responsible for the supplies. (See DA Pam 710-2-1, Chapter 2.) Upon receipt of an item, the supply sergeant takes the following actions:

- Checks the quantities and national stock numbers.
- Checks the serial numbers when applicable. Checks each item's serial number with the one recorded on the receipt document. If no serial number is listed on the receipt document, enters it.
- Inventories components of end items against applicable technical manuals or supply catalogs to make sure all components have been received.
- Reports discrepancies to the supply support activity IAW AR 735-5.

Storage and Protection

The supply element may be required to store and protect certain items. See AR 190-51.

- **Ammunition.** Operational situations may prevent storage of ammunition in magazines or special storage rooms. If so, the unit commander may be authorized to store the basic load of ammunition on vehicles or trailers or in other ways demanded by the situation. See AR 190-11.
- **Weapons.** The armorer controls and protects stored weapons. The supply sergeant makes sure the armorer performs these functions according to FM 10-14, Chapter 7.
- **Lubrication and Oils.** The supply element stores containers on dunnage or pallets. If stored outside, they should be covered with tarpaulins. See DA Pam 746-1 for details on pallets. The supply element inspects all cans for leaks before storing them. Empty containers are stored separately and empty containers are disposed of in accordance with local environmental policy. Proper type fire extinguishers should be available with sand barrels nearby.
- **Rations.** The supply element stores the basic load of rations on dunnage under tarpaulins. This prevents damage from moisture and rodents.
- **Expendable Items and Housekeeping Supplies.** Small items, such as soap, may be stored beneath the issue counter, other items in bins or on shelves. Items in frequent demand should be in the most accessible places.

- **Organization Clothing.** A few items of clothing (to be used in emergencies) may be stored on shelves in the company supply tent. See FM 10-14, Chapter 7, for storing clothing.
- **NBC Protective Items.** Replacement stocks of individual MOPP gear should be stored so that they are ready for issue in the event of nuclear, biological, or chemical warfare. The supply element should be prepared to replace defective items or items that are incorrectly sized. The supply sergeant should have at least one extra overgarment for each soldier in the company. The battle dress garment provides adequate protection for up to 22 days as long as it is not ripped, torn, soaked with petroleum, or contaminated. It will protect the wearer for 24 hours after contamination by a liquid chemical agent. The garment should be exchanged as soon as tactically possible. See FM 3-4 for more details.

Inventories

The supply sergeant should be prepared to help take inventories of property. Property records should always be ready for inspection. Policies for inventories and inspections are covered in AR 710-2. Specifics are covered in DA Pam 710-2-1, Chapter 9.

Issues

The supply sergeant is responsible for issuing three types of property: nonexpendable, expendable, and durable. He must accurately account for these issues, which are usually made directly to the user identified on the authorization document. DA Form 2062 is used to subhand-receipt items from the commander, to the supervisor, to the user. DA Pam 710-2-1 gives procedures for posting transactions to DA Form 2062. To prevent frequent postings, the unit commander may authorize that DA Form 3161 or DD Form 1150 be used as a change document. Change documents should be posted to the hand receipt at least every six months, counting from the oldest change document in effect (see AR 710-2).

- **Property Book Items.** Issues of property book items must be recorded on DA Form 2062, DA Form 3161, or DA Form 3749. The hand receipt holder must sign the form.
- **Weapons.** A DA Form 3749 must be turned in to the supply specialist each time a soldier draws a weapon. The supply specialist must maintain a control log of weapons issued (if for more than 24 hours) and a master authorization list.
- **Expendables.** Expendables are not carried on the property book or hand receipts. The supply sergeant enforces supply discipline to prevent loss, misuse, or pilferage of items. To prevent excessive demand for expendable items, he sets up a control sheet to determine normal requirements. If demand exceeds these levels, he takes action to find out why. To enforce supply discipline, all soldiers must be made aware of the importance of preserving Army property. Any practice that wastes supplies or damages or destroys property must be corrected. Oral or written reprimands may be given, efficiency reports may be annotated, or Article 15 or court-martial may be used for a serious incident.

Turn-In

Supplies and equipment should be turned in when they exceed authorized allowances, when they are unserviceable or uneconomically repairable, or when they are found on the installation. DA Form 2765-1 is used to turn in these items to the supply support activity that usually issues them.

Laundry

Laundry service support depends on whether fixed permanent laundries are available in a host nation. In contingency areas, laundry and renovation support is provided when the tactical situation permits. QMS and field service units provide this support in the corps and COMMZ. Laundry operations under field conditions may depend more on local SOP than on procedures in FM 10-280.

Section IV. FIELD KITCHEN

MISSION

The Army field feeding system calls for two hot meals and one MRE as the basic combat ration. A food service team with its food service equipment provides the T-Ration meals from unitized modules. The unit is authorized the trailer-mounted field kitchen (MKT-75, MKT-75A, MKT-82, MKT-85, or MKT-90 [LIN L28351]). The MKT is a collection of food preparation and serving equipment mounted on a 1-1/2-ton trailer (see Figure 4-4). One MKT can be used to prepare and serve A-, B-, H&S, or T-Ration meals for up to 300 soldiers per meal. The prime movers for the MKT are the 2-1/2-ton or 5-ton medium cargo trucks. Each MKT comes with a prime mover. The containerized kitchen (CK) will replace the MKT when development is complete and as it becomes available. The CK will be capable of supporting 500 soldiers and preparing any of the group ration meals. For more information on the MKT, see FM 10-23 and TM 10-7360-206-13. The unit is also authorized a sanitation center (SC [LIN S33399]) consisting of required equipment to clean and sanitize the food service equipment. One SC is required per MKT.

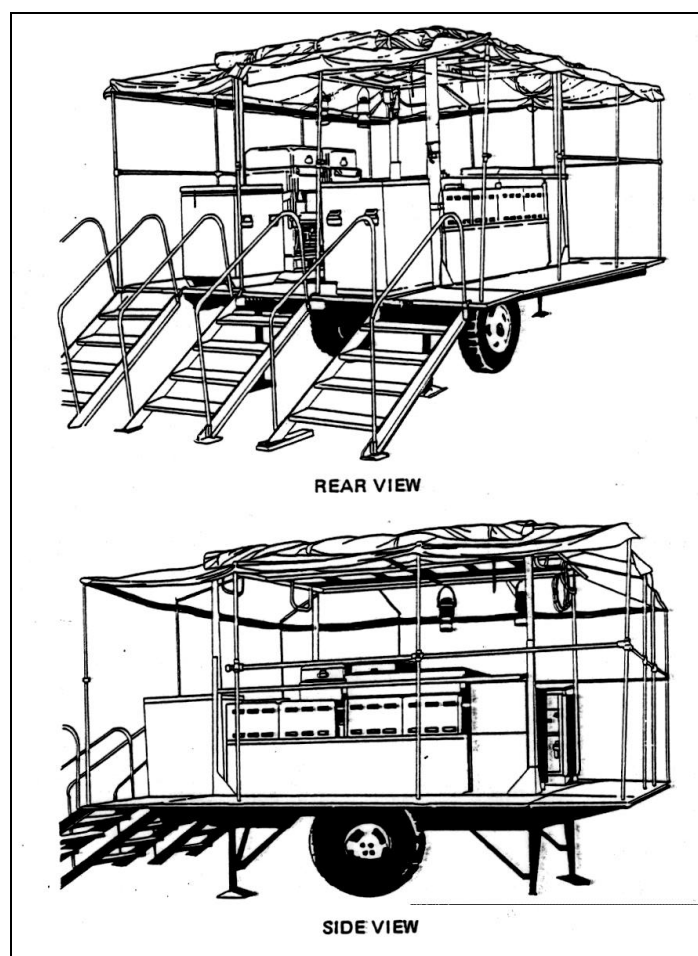


Figure 4-4. Mobile kitchen trailer MKT-75
Required Information

The senior food service sergeant is responsible for field kitchen operations. The kitchen SOP and production schedule provide written instructions. They detail on a day-to-day and meal-by-meal basis such matters as responsibilities, work procedures, standards, and acceptable methods. To manage field kitchen operations, the senior food service sergeant must know the following:

- Where the field kitchen is to be set up.
- Location and strength of supported soldiers.
- Location of transfer points, Class I supply points, and water points.
- Location of Class III supply points for refueling kitchen vehicles and securing fuel for kitchen equipment.
- Ration issue frequency and turnaround time for obtaining rations and water.
- Time required to reach and serve soldiers operating at remote locations. Food in insulated containers will hold serving temperatures for up to four hours.
- Designated ration cycle.
- Location of garbage collection points.

Kitchen SOP

A kitchen SOP ensures that all food service soldiers know what is expected of them. It may be a separate SOP or part of the company SOP. The SOP should include the following:

- Responsibilities for field kitchen operations (see Table 4-2).
- Schedule for serving meals.
- Sanitation requirements, including procedures for disposal of kitchen wastes.
- Safety precautions.
- Information on care and operation of equipment.
- Records and reports required.
- Procedures for delivery of meals for those who cannot come to the field kitchen.
- Procedures for pickup of rations and water.
- Information on how to store rations.
- Information on training programs.
- Measurement equivalents.
- Ration forecasting and accountability, meal card control, and cash control procedures.
- Preparation and serving of food and water in an NBC environment.

Operations

The senior food service sergeant establishes a system for the routine operation of the feeding site. He checks with the S1 section or has the first sergeant or unit clerk report any changes in troop strength. These changes will affect rations delivered. He informs the field kitchen of any operational changes and location of soldiers. If possible, this should be part of the SOP. He checks cooks for cleanliness and signs of illness or infection, referring those who show such signs to a medical facility for evaluation. See TB MED 530 for additional guidance. As a rule, the following assumptions apply:

- Food can be prepared in one central location. Soldiers from the supported unit will pick up, deliver, and serve prepared food at the unit location. They will return insulated food containers to the kitchen site.
- T-Rations will be issued in preconfigured, packaged meals, according to the approved menu.
- Each T-Ration module will contain a different meal; each meal will have a unique stock number.
- MREs will be issued when T-Rations cannot be prepared.
- When rations have not been unitized, units will order rations by indicating the number of meals required.
- Cooking will be curtailed during NBC operations.

SETUP AND CLOSEDOWN

Field situations seldom allow the field kitchen to operate under ideal conditions. However, the senior food service sergeant has to do the best he can with the area assigned. He should develop a layout plan. Figure 4-5 shows a layout plan for feeding A- and B-Rations with the MKT. Other layout plans are in FM 10-23.

Setup

To set up the field kitchen, the senior food service sergeant—

- Pitches the kitchen tent.
- Off-loads and positions equipment.
- Sets up the mobile kitchen trailer.
- Camouflages the area.

Closedown

After receiving moving instructions, he—

- Secures rations.
- Fills containers.
- Shuts down ranges.
- Strikes the kitchen tent.
- Loads vehicles (see Figure 4-6, page 4-26).

OPERATIONS

Ration Receipt

4-25

quality, and condition. The SOP should detail exactly what should be checked. For example, supplies should be checked for damage from moisture, insects, or rodents as well as for swollen or leaking cans.

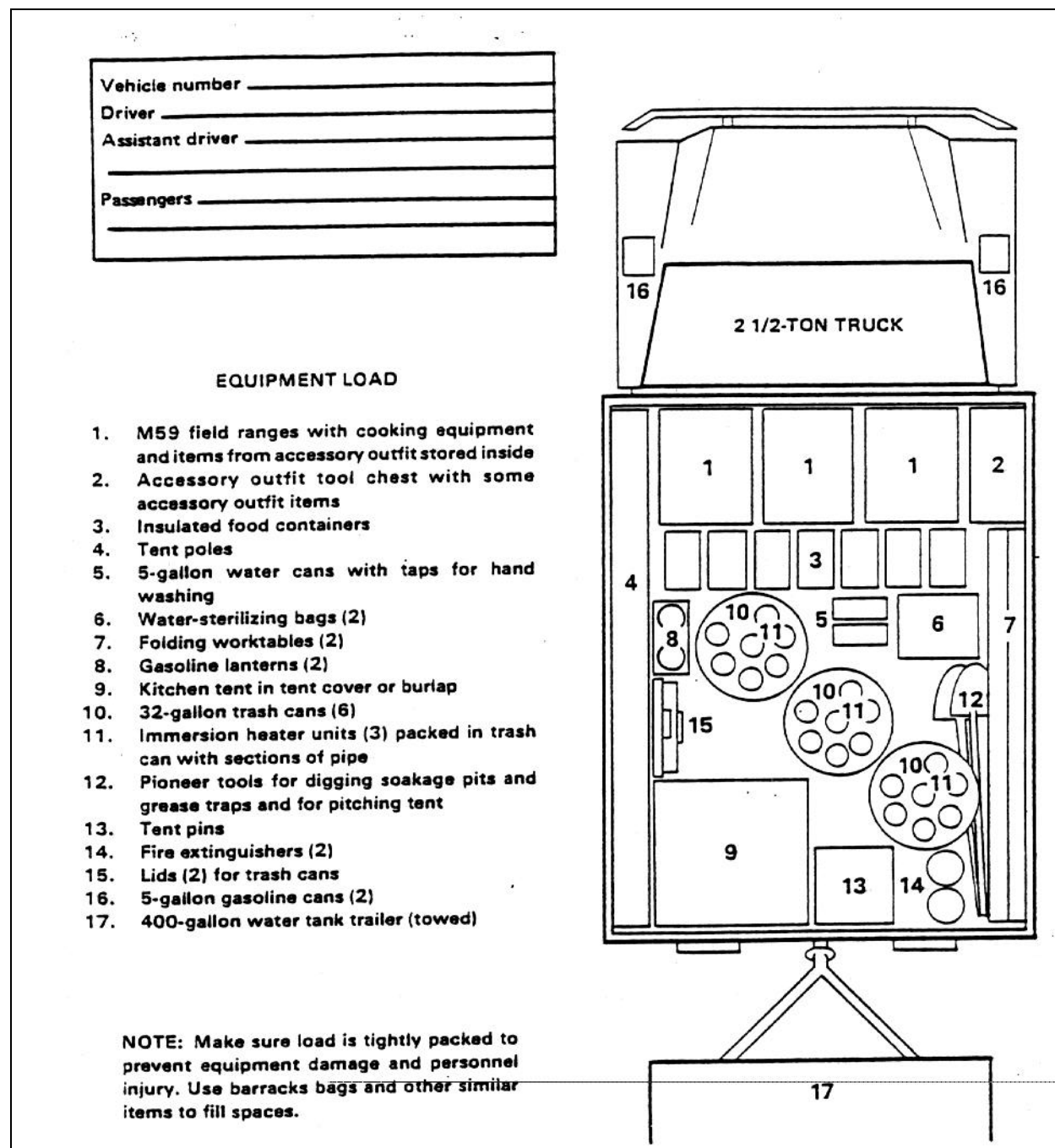


Figure 4-6. Sample loading plan for field kitchen

Ration Storage and Protection

Daily ration pickup reduces spoilage, theft, and the amount of storage space needed. The storage area should link to the road network, preferably by a one-way access road for kitchen traffic only. Aisles must be wide enough to allow items to be stored or removed from storage easily. Food items should be protected against insects and rodents

and isolated from nonfood items like cleaning solutions, pesticides, and rodenticides. Correct storage procedures will aid in the proper rotation of ration items and will ensure their use on a first-in, first-out basis. Rations should never be stored directly on the ground. Pallets or dunnage will protect rations from moisture and water damage. Dunnage can be constructed from lumber, logs, railroad ties, ammunition boxes, crates, or bamboo. See DA Pam 746-1 for more on pallets. Tarpaulins protect rations stored outside. Authorized tarpaulins may be requisitioned through supply channels. See CTA 50-909. Tarpaulins should be tied to ration cases or pins driven into the ground. To allow air to circulate in tropical climates, a tarpaulin should not cover the bottom third of the stacks. A tarpaulin spread over a triangular wooden frame provides a dry, ventilated, tent-like shelter for rations. The triangular frame should be constructed so that its edges extend beyond all sides of a stack. If a GP tent is used, the additional space can be used to store rations on dunnage inside the tent. If NBC agents are suspected in the area of operations, all open food packages should be containerized, using multiple layers of plastic bags. All food stocks should be covered with chemical-resistant plastic coverings, with cracks sealed to keep chemical vapors out of food and food containers. See FM 10-23 for more details.

Meal Preparation and Serving

Cooking instructions are printed on each tray pan. Rations should be prepared according to theater T-Ration menu guidance. Food may also be prepared according to SOP for items that have no recipe number and which do not vary in preparation (for example, fruit juices or bread). If the theater commander determines that use of A-Rations is feasible, meals may be prepared according to the theater master menu and recipes in TM 10-412.

Record Keeping

Higher headquarters will determine record-keeping requirements under field conditions. Keeping an informal equipment logbook may be helpful, with notes on maintenance services, repairs, and replacement parts. The notes will help the senior food service sergeant develop a planned replacement program. They will also help him spot careless use of equipment and poor operator maintenance.

Remote Feeding

Remote feeding is feeding soldiers deployed more than walking distance from the food preparation site. It may be done by a variety of methods. Battalions may send hot meals forward to remote units using food containers. When that is not feasible, the battalion may attach an MKT with cooks to the remote unit for the preparation of meals. Depending on its strength, length of mission, and other tactical and logistical considerations, the remote unit may be administratively attached for rations to the nearest unit with a rations preparation capability.

Section V. SUPPLY CONTROL SECTION

MISSION

The mission of the supply control section is to coordinate the receipt, storage, and issue of bulk petroleum. The supply control section ensures that petroleum will be available when and where it is needed. This section

- Coordinates transportation required to transport fuel to and from supply sections.
- Establishes and maintains stock control records.
- Coordinates procedures for receiving, storing, and issuing fuels.
- Establishes and maintains wire net communications for the unit.
- Maintains accountability of fuel stored within the company.

- Under direction of the battalion, directs, coordinates, and supervises the technical operations of the company.

PERSONNEL DUTIES

Table 4-7 details duties of supply control section personnel.

Table 4-7. Duties of Supply Control Section Personnel

POSITION	SC/ MOS	SKILL LEVEL	GRADE	TOTAL	DUTIES
Petroleum Supply Officer	92F		LT	1	Coordinates and controls mission functions of petroleum supply company operating elements. Coordinates bulk petroleum operations of the petroleum supply company. Directs bulk petroleum accounting operations, determines bulk petroleum requirements, and reallocates bulk petroleum according to command policies. Maintains close liaison with transportation medium truck companies that distribute bulk fuel to and from supply sections. Coordinates barge, rail, and air movements of bulk petroleum with supply platoons. Assists supply platoons in the location of suitable bulk storage areas, surveying of routes, and determination of
Petroleum Operations Sergeant	77F	5	E8	1	Assists petroleum supply officer in consolidating reports being maintained and submitted to higher headquarters. Develops communications manning schedules.
Petroleum Inventory Control Specialist	77F	2	E5	1	Receives, consolidates, and forwards to higher headquarters stock status information received from operating elements of the supply platoons. Maintains inventory control and location records of bulk petroleum products. Prepares and edits supply requisitions. Processes request and receipt documents. Prepares and maintains accounting records. Processes requests for follow-up and cancellation. The Skill Level 1
	77F	1	E4	1	
Forward Signal Support Specialist	31U	1	E4	1	soldier also serves as a radio and switchboard operator. Installs and troubleshoots signal support equipment and terminal devices. Provides technical assistance and training for user-operated automation and communication equipment. Installs, maintains, and operates the unit's organic wire net on a 24-hour basis.
Signal Support Systems Specialist	31U	1	E3	1	
Administrative Clerk	71L	1	E3	1	Prepares and types operational reports to be forwarded to higher headquarters. Operates and performs operator maintenance on office machines. Files regulations and correspondence. Performs messenger service. Distributes incoming and outgoing requisitions. Handles bulk mail and prepares it for dispatch. Serves as vehicle driver. Operates radio and switchboard.

OPERATIONS

The supply control section, under the direction of the battalion, directs, coordinates, and supervises the technical operation of the company and serves as the central point of control for unit mission operations. The section coordinates the receipt, storage, and issue of bulk petroleum, which includes the delivery of bulk petroleum by organic 5,000-gallon semitrailer tankers to locally supported units. FM 10-67-1 gives detailed steps for the receipt, storage, and issue of bulk petroleum. Detailed procedures for accounting for petroleum products are discussed in DA Pam 710-2-1.

Accounting for Bulk Petroleum

The supply control section establishes and maintains stock record accounting for all bulk petroleum products, using the following accounting records:

- **Receipt Records.** When delivered, fuel will come with a DD Form 1348-1 or other locally approved form, depending on major command. This form is used to verify receipt of the correct amount and type of petroleum.
- **Issue Records.** A DA Form 2765-1 showing the amount requested will be submitted by the customer unit for fuel issues. The section retains DA Form 2765-1 for preparing the daily status report. It records issues to supported units not having organic refuel capacity on DA Form 3643 and also on the daily status report.
- **Status Reports.** Each day the section consolidates issues and prepares a daily status report. The status report gives the product description, amount received and issued, and the balance of stock on hand by product type. The completed report is forwarded to the POL operations branch of the petroleum supply battalion. A file copy is retained in the section. The section is also required to prepare a monthly DA Form 3644, using DA Form 3643 to post it. At the end of the month the DA Form 3644 is forwarded to the POL operations branch, petroleum supply battalion.
- **Stock Records.** The section maintains a DA Form 1296 for each type or grade of bulk petroleum products. The record shows how much of each product is on hand and where each product is at a given hour. DA Form 272 and DA Form 2062 are used to post and control accountable documents and maintain an audit trail. Procedures for preparing DA Form 272 are in DA Pam 710-2-2.

Fuel Inventories

In accordance with AR 710-2, inventory reconciliations are done daily where issues and receipts are made on a daily basis. In addition to daily and weekly inventories, a monthly physical inventory will also be taken IAW AR 710-2 for each type and grade of product. The petroleum supply officer is responsible for scheduling inventories and providing an SOP directive for inventory procedures.

SOP. The petroleum supply officer, assisted by the petroleum operations sergeant, should prepare or update an SOP to be used in inventorying petroleum products. As a minimum the SOP should cover

- Receiving cutoffs.
- Assignment and responsibilities of inventory count team personnel.
- Noninventoried areas.
- Assignment of inventory voucher numbers.
- Inventory counts and records.

- Issue during inventory.
- Preparation of inventory adjustment reports (IARs) and reports of survey.
- Correction of stock records.
- After-inventory actions.

Inventories. Petroleum inventory control specialists are responsible for taking and recording inventories. Rigid-wall tanks or containers will be gauged and their volume corrected IAW FM 10-67-1. Collapsible-wall tanks or containers will be inventoried by reconciling beginning inventory, issues, and receipts and by physically checking the tank, couplings, fittings, and areas around the tank to ensure no leaking has occurred. A common-sense approach must be used in visually checking the container to determine that the stated quantity appears to be present by volume. When an inventory is completed, petroleum inventory control specialists total the quantities for products held in several locations and compare inventory balances with recorded balances on DA Form 1296. The inventory is documented on DA Form 4702-R, reflecting the quantity on hand as of 0800 hours local time on the last day of the month, per AR 11-27. All supporting documents will be attached to the DA Form 4702-R and submitted to higher headquarters. The inventory SOP should explain these duties in detail.

Status Reports. Every 24 hours of operation, petroleum inventory control specialists assigned to each of the two platoon headquarters consolidate the status reports received from each of three supply sections and forward them to the supply control section. In turn, every 24 hours of operation, petroleum inventory control specialists assigned to the supply control section consolidate and forward to battalion headquarters the status received from each of the two platoon headquarters. Petroleum battalions then submit status reports to the higher headquarters. Whether these status reports will be submitted every 24 hours or every month depends on the theater situation and will be stipulated in directives, SOPs, or petroleum distribution plans. Daily and monthly reports provide the petroleum supply officer a source from which to estimate receipts and issues for the next 24 hours of operation. They will be of particular value when a company assumes the support of like units performing like missions. It is also from these estimates that the petroleum supply officer forecasts estimations for transportation requirements.

Transportation Requirements

The petroleum supply company is authorized vehicles for internal and local distribution only. In order to receive and issue bulk petroleum, it must rely on the transportation medium truck company (petroleum) that normally is organic to the petroleum supply battalion. The petroleum operations branch, petroleum supply battalion, has responsibility for coordinating the distribution of bulk petroleum. It receives its instructions from the supporting MMC; it determines transportation requirements for bulk fuel distributed by tank truck and tasks the transportation medium truck company accordingly. The petroleum supply officer is responsible for coordinating transportation to move bulk petroleum from the company to supported units. The petroleum supply company obtains its petroleum products from the petroleum pipeline and terminal operating company by any means available, based on status reports. To estimate transportation requirements, the petroleum supply officer will need to know

- The capabilities of a transportation medium truck company (petroleum) at 75 percent capacity.
- Time estimates for fuel transporters to make local hauls and line-haul round-trips between supporting and supported units.
- Time estimate changes when situations require use of alternate routes.
- Time estimates for fuel transporters to make local haul and line-haul round-trips between rail nets where railcars await loading or off-loading at each of six widely dispersed supply sections.
- Location and amount of fuel and space available in each of the six supply sections on an hourly basis. The petroleum supply officer or his NCOs should verify status report data by telephonic communication with supply section chiefs.

Quality Surveillance Procedures

Quality surveillance requires more than periodic sampling and testing. It also requires proper handling procedures during storage, loading, and unloading operations. Quality surveillance is not only determining the quality of fuels but maintaining the quality so that products are suitable for their intended use. FM 10-67-2 provides detailed information about quality surveillance. To improve handling and control measures, the petroleum supply officer should include the following quality surveillance procedures in the unit SOP.

Storage Surveillance Procedures. Storage surveillance procedures are a necessary means to ensure safety and quality surveillance. Section personnel should—

- Separate grades and products. Issue each product through a separate system. Use separate valves, pumps, and transfer lines for each type and grade of fuel.
- Convert tanks to different product IAW FM 10-67-1.
- Visually check tanks daily for water through the bottom drainage outlet.
- Allow a minimum settling period of two hours.
- Drain fuel tanks of water after each receipt of fuel.
- Inspect filter equipment according to operation and maintenance manuals.
- Sample and test dormant stocks as prescribed by minimum frequency tables for testing petroleum products in Military Handbook 200.
- Ensure that filter/separators, filter effectiveness tests, and filter differential pressures are in accordance with FM 10-67-1.

Loading and Unloading Controls for Tank Cars and Vehicles. Loading and unloading controls for tank cars and vehicles requires constant quality surveillance measures. Personnel—

- When possible, store the same product in tank cars and vehicles to lessen the need for cleaning and prevent contamination. Some tank cars may be divided into two sections (for example, one side may be used for mogas and the other for JP-8). **DO NOT SPLIT-LOAD TANK VEHICLES BECAUSE OF MIXING OF PRODUCT IN COMMON DISCHARGE SYSTEMS.** The danger lies in using the same discharge system, which could contaminate one of these fuels.
- Inspect tank cars and vehicles for cleanliness and suitability for receiving product.
- Make a visual test and ensure an API gravity test is performed on the product sample before and after loading and before unloading.
- If the API gravity differs by more than 0.5 API degrees from that reported on the transportation documents, do not unload the product until additional testing confirms its quality. Samples of products in question should be sent to the nearest mobile or base petroleum laboratory for further testing.
- After loading, check contents, secure dome covers, and attach seals to domes and outlets.
- Check seals at destination and perform receiving checks.
- If water is present, drain it.

Communications Operations

Advance party personnel will already have laid and installed wire for telephones and switchboards according to the wire net diagram. Communications equipment should be allocated as needed to accomplish the mission. Thus, in tactical situations, phones might be given up to observation or listening posts. With arrival of communications equipment, operators will ground equipment, connect wire, and test connectors and circuits. Operators should then perform a complete communications check of equipment. They should check installation of lightning arresters and ground equipment before operation. The petroleum operations sergeant should develop manning schedules to ensure a 24-hour operation of communication equipment. The petroleum supply officer and all NCOs must continually make sure that all personnel follow COMSEC measures to prevent jamming, interference, and deception. Refer to Chapter 6 for more information on communications. Supervisors must ensure that operator and unit equipment maintenance manuals are current and available for all communications items.

EQUIPMENT

Table 4-8 lists the equipment needed for completion of the mission as prescribed by TOE 10427.

Table 4-8. TOE Equipment List for the Supply Control Section

ITEM	QUANTITY
Antenna group: OE-254/GRC	1
Axle cable reel: RL-27	1
Transit case logic module group:(supports SARRS-1)	1
Cable telephone: WD-1/TT DR-8 1/2 KM	2
Cable telephone: WD-1/TT RL-159/U 2 KM	1
Case transit monitor keyboard group: OA-9252/TYQ-33(V)	1
Case transit printer unit group: OA-9251/TYQ-33(V)	1
Camouflage screen support system: woodland/desert	5
Camouflage screen system:wdlndlt wt radar scat w/ospt sys (subst in desert/snow envir)	5
Inst kit: MK-2325/VRC for AN/VRC-87/88/90 in HMMWV	1
Inst kit: MK-2326/VRC for AN/VRC-89/91/92 in HMMWV	1
Light set general illumination: 25 outlet	1
Night vision goggle: AN/PVS-7B	1
Radio set: AN/VRC-89A	1
Reeling machine cable hand: RL-31	1
Reeling machine cable hand: RL-39	2
Radio set: AN/VRC-88A	1
Tone signaling adapter: TA-977/PT	1
Telephone wire with reel: MX-10891/G	1
Telephone digitalnonsecure voice: TA-1035/U	1
Truck utility: cargo/troop carrier 1-1/4 ton 4X4 WE (HMMWV)	1
Splicing kit telephone cable: MK-356/G	1
Switchboard telephone manual: SB-22/PT	1
Utility receptacle	1
Telephone set: TA-312/PT	2
Trailer cargo: 3/4-ton 2-wheel W/E	1
Data transfer device: AN/CYZ-10 (C)	1
Data transfer device: AN/CYZ 10	2
Trailer cargo: high mobility 3/4-ton	2

Section VI. CLASS III SUPPLY PLATOONS

MISSION

The petroleum supply company has two supply platoons. The two platoons may operate in the same location or in two widely scattered areas. Each supply platoon's mission is to—

- Receive, store, issue, and distribute bulk petroleum and perform quality surveillance.
- Operate bulk petroleum storage facilities using collapsible tanks.
- Lay, operate, and retrieve 7.5 miles of collapsible hose line per day.
- Provide storage for up to 1,380,000 gallons of bulk petroleum fuels. (Each supply section can store up to 460,000 gallons of bulk petroleum fuels with 100 percent equipment availability.)
- Provide limited mobile filling station service.

ORGANIZATION FOR OPERATIONS

After a general operating area for the company is designated by battalion headquarters, the company commander may ask the platoon leader to assist in reconnaissance of the area to determine the best location for the supply platoon. Once the site has been selected, the platoon leader must establish operating areas for all elements of the supply platoon. It is his responsibility to develop a layout plan and establish these operating areas.

PLATOON HEADQUARTERS

The mission of the supply platoon headquarters is to supervise and control platoon operations.

Personnel Duties

Platoon headquarters personnel direct the operation of the supply sections, select and prepare operating sites, and operate materials-handling equipment to load, off-load, and position petroleum operating equipment. Table 4-9 details the duties of supply platoon headquarters personnel.

Table 4-9. Duties of Supply Platoon Headquarters Personnel

POSITION	SC/ MOS	SKILL LEVEL	GRADE	TOTAL	DUTIES
Platoon Leader	92F		LT	1	Commands the platoon. Supervises and controls platoon operations. Reconnoiters sites, develops layout and loading plans, and prepares contingency plans for demolition. Directs the placement and camouflage of supplies and equipment. Determines how to use personnel and equipment to accomplish the platoon's mission. Consolidates, prepares, and reviews technical, personnel, and administrative reports. Contributes to and updates portions of the company SOP dealing with platoon operations. Advises the company commander on the selection of an operating site. Directs the survey team on layout requirements, prepares personnel and equipment for movement, and moves personnel and equipment to the operating site. Directs the setting up of an operating site.

Table 4-9. Duties of Supply Platoon Headquarters Personnel (Continued)

POSITION	SC/ MOS	SKILL LEVEL	GRADE	TOTAL	DUTIES
Platoon Sergeant	77F	4	E7	1	Assists the platoon leader. Responsible for the consolidation of all reports prepared in the operating sections. Forwards statistical data to the company's operations section. Responsible for the maintenance of files maintained by the platoon. Notifies section chiefs of vehicle arrival time. Coordinates use of heavy construction and materials-handling equipment in preparing sites and loading and off-loading equipment. Reviews equipment records and logs. Helps develop a pilferage control program.
Petroleum Supply Sergeant	77F	3	E6	1	Assists the platoon sergeant by supervising two shift operations. Maintains close coordination with the petroleum operations sergeant.
Construction Equipment Operators	62E	1	E4/3	2	Operate the equipment used to build berms and unimproved road nets and to recover spills, leaks, or breaks in fire walls. Serve as heavy vehicle operators when required. Level ground for FSSP. Create storage areas for collapsible storage tanks. Build fire walls around tanks and firebreaks throughout bulk storage areas. Grade and maintain unimproved roadnet used by semitrailers for refueling and discharging bulk fuel. Participate in spill contingency and control operations.
Petroleum Inventory Control Specialists	77F	2 1	E5 E4	1 1	Maintain platoon's stock status on a 24-hour basis. Maintain inventory control and location records of bulk petroleum products within platoon. Process requisitions, requests, and turn-in documents. Adjust stock as required. The Skill Level 1 soldier drives the 1-1/4 ton truck and operates the vehicle-mounted radio.
General Construction Equipment Operator	62J	1	E4	1	Operates air compressor to evacuate assault hose line. Operates SEE and attachments, performing digging, backfilling, and loading operations.
Petroleum Laboratory Sergeant	77L	2	E5	1	Performs required quality surveillance testing of petroleum products to ensure products are suitable for intended use. Coordinates with POL laboratories for extended tests beyond the capabilities of unit's assigned testing equipment.

Direction of Overall Operations

A major function of the supply platoon headquarters is to provide supervision and direction of the overall operation of the platoon. The platoon leader and platoon sergeant assume the following responsibilities.

- Defense. Prepare personnel to respond to ground and air attacks. Procedures for responding to threat activity are covered in Chapter 6. Supervise the establishment of the unit defense while subordinate elements are preparing to occupy their designated areas.

- **Camouflage.** Supervise camouflage activities once unit elements have established the defense and their operating sites. Refer to FM 20-3 for details on camouflage activities.
- **Capabilities.** Make sure the necessary supplies are available to get the job done. Brief the company commander on the overall capability of the platoon. Emphasize personnel strength and equipment availability.
- **Sanitation.** Ensure that proper sanitation procedures are followed and that field sanitation standards comply with Army regulations and policies. For more information on field sanitation operations, refer to FM 21-10 and AR 40-5.
- **Maintenance.** Supervise operator maintenance once operators are assigned equipment and technical manuals, tools, and expendable supplies are available. Ensure that personnel perform all operator maintenance according to the appropriate technical manual. Make sure that all required entries are recorded on an equipment inspection and maintenance work sheet and that all deficiencies are noted. The need for maintenance above operator level is reported to the company motor sergeant. Operator maintenance is covered in Section VI.

Coordination of Supply Operations

Once the supply platoon is operational, the platoon headquarters must coordinate and monitor operations performed by platoon personnel. The platoon leader and platoon sergeant

- Assign tasks to the sections as required.
- Coordinate activities with supported units to ensure that the mission is accomplished and correct procedures are used.
- Ensure that plans and operations are carried out according to correct operating procedures.

Requests and Status Reports

The petroleum inventory control specialist uses AR 725-50 and DOD 4140.25M to prepare and process DD Forms 250, 250-1, 1149, and 1348-1. Every 24 hours the status report data from the supply sections will be consolidated, and a report will be sent to the supply control section. The format for the status report should be detailed in both the company and battalion SOPs.

Equipment

The ability of the supply platoon headquarters to perform its assigned functions depends on the availability of authorized equipment. Table 4-10 lists the TOE equipment for each supply platoon headquarters.

Table 4-10. TOE Equipment List for a Supply Platoon Headquarters

ITEM	QUANTITY
Antenna group: OE-254()/GRC	1
Cable telephone: WD-1/TT DR-8 1/2 KM	3
Camouflage screen support system: woodland/desert	13
Camouflage screen system: woodland w radar scat w/ospt sys	13
Distribution system electrical: 120v 1ph 60 amp	1
Generator set: ded skid-mounted 5kw 60hz	1
Filter/separator liquid fuel: 50 GPM	1
Installation kit: MK-2325/VRC for AN/VCR-87/88/90 in HMMWV	1
Light set general illumination: 25 outlet	1
Night vision goggle: AN/PVS-7B	5
Power supply: PP-6224/U	1
Pumping assembly flammable liquid: 50 GPM	1
Radiac set: AN/VDR-2	1
Reeling machine cable hand: RL-39	2
Radio set: AN/VRC-90A	1
Semitrailer low bed: 40 ton 6 wheel w/e	1
Tractor wheeled: DSL 4x4 w/excavator and front loader	1
Truck tractor: MET 8x6 75000 GVW w/w c/s	1
Truck utility: cargo/troop carrier 1-1/4 ton 4x4 w/e (HMMWV)	1
Switchboard telephone manual: SB-993/GT	1
Telephone set: TA-1/PT	1
Telephone set: TA-312/PT	1
Testing kit petroleum	1
Tool kit carpenters: Engineer squad w/chest	1
Tractor fulltrckd low speed: dsl meddbp w/bulldozer wscarif winch	1
Alarm chemical agent automatic: XM22	1
Data transfer device: AN/CYZ-10	1
Truck cargo: MTV w/e	1
Pocketradiac	1

SUPPLY SECTION

The mission of each of the six supply sections is to provide and operate the wholesale bulk petroleum storage facilities. Each supply section has a storage capacity of 460,000 gallons of bulk petroleum fuels (at 100 percent equipment availability). Each supply section can lay, operate, and retrieve approximately 2.5 miles (4 kilometers) of collapsible hose line and provide limited mobile filling station service.

Personnel Duties

Duties of personnel for each of the six supply sections are given in Table 4-11.

Table 4-11. Duties of Supply Section Personnel

POSITION	SC/ GRADE	SKILL LEVEL	GRADE	TOTAL	DUTIES
Section Chief	77F	3	E6	1	Supervises and controls supply section operations and personnel. Supervises and assists in the installation, operation, and maintenance of petroleum storage facilities.
Petroleum Inventory Control Specialist	77F	2	E5	1	Maintains section's stock status on a 24-hour basis. Maintains inventory control and location records of the bulk petroleum products within the section. Processes requisitions, requests, and turn-in documents. Adjusts stock as required.
Petroleum Heavy Vehicle Operators	77F	2H7 1H7	E5 E4	1 2	Drives the 5-ton tractors that tow the 5,000-gallon semitrailers that provide internal fuel transfer between supply points, limited local delivery distribution, and hose line evacuation. Assists other petroleum-handling specialist when not operating or maintaining vehicles. Skill Level 1 personnel may be required as radio operators.
Petroleum Supply Specialists	77F	1	E4 E3	5 11	Operate the bulk petroleum storage facilities for wholesale distribution. Operate the pumps and filter/separators that simultaneously deliver fuel to 5,000-gallon tank semitrailers, receive fuel into bulk storage and discharge fuel into hose lines. Lay, operate, and retrieve hose line. Each section can lay approximately 2.5 miles of hose line per day and retrieve approximately 5/8 mile of hose line simultaneously over rolling terrain. Lay, assemble, and operate FARE when used for mobile filling station operation. When required, operate forklift and MHE. Also serve as radio operators and light vehicle drivers.

Storage

Storage facilities large enough to meet daily peak demands will increase efficiency by eliminating long waits by customers in the supply section. Each supply section has one augmented fuel system supply point, consisting of two 10,000-gallon collapsible fabric tanks, four 20,000-gallon collapsible fabric tanks, six 350-GPM pumps, and four filter/separators. Additionally, each section has six 50,000-gallon collapsible tanks supported by one 350-GPM pump for each two collapsible tanks. Each supply section has one forward area refueling equipment (FARE) with three 500-gallon collapsible drums to support limited mobile service station operations.

Equipment

A supply section's ability to perform its assigned function depends on the availability of equipment. Table 4-12, page 4-38, lists equipment prescribed by TOE for each supply section.

Table 4-12. TOE Equipment List for a Supply Section

ITEM	QUANTITY
Alarm, chemical agent automatic: portable canpack	1
Cable telephone: WD-1/TT DR-8 1/2 km	2
Camouflage screen support system: woodland/desert, plastic poles	66
Camouflage screen system: woodland light weight, radar scattering, without support system	66
Compressor unit, rotary: air trailer-mounted, diesel-driven 250 CFM, 100 PSI	1
Pressure assembly control w/multiple components	1
Floodlight set, trailer-mounted: 3 floodlights 1000 watt	1
Generator set: Ded skid-mounted 3kw, 60 Hz	1
Filter separator, liquid fuel: 350 GPM 1 1/2 4 inch inlet, 4 inch outlet	8
Drum, fabric collapsible: liquid fuel, 500-gal capacity	3
Forward area refueling equipment (FARE)	1
Fuel system supply point: portable, 60,000 gal, less filter pump and tank	2
Hose line outfit, fuel handling: 4 inch diameter	1
Night vision goggle: AN/PVS-7B	8
Pumping assembly, flammable liquid, engine driven wheeled: 4 inch inlet/outlet 350 GPM	8
Pumping assembly, flammable liquid, engine driven wheeled: 4 inch inlet/outlet 350 GPM w/	1
Radiac meter: IM-93/UD	
Radiac set: AN/VDR-2	
Radio set: AN/VRC-119A	3
Repair kit, collapsible fabric tank: Type II, repairs up to 6 inch tears	3
Sampling and gauging kit: petroleum military spec document type	2
Semitrailer, flatbed: break-bulk/container transporter, 22-1/2 ton	1
Semitrailer, tank: 5000 gal fuel dispensing automotive with equipment	2
Tank assembly, fabric collapsible: 10,000 gal petroleum	8
Tank assembly, fabric collapsible: 20,000 gal petroleum	4
Tank assembly, fabric collapsible: 50,000 gal petroleum	6
Tank assembly, fabric collapsible: 160 gal water	2
Telephone set: TA-1/PT	2
Testing kit petroleum: aviation fuel contamination	1
Tie-down assembly: chain type for holding collapsible fabric drums	1
Tractor, wheeled, ind: DED 4X4 w/forklift and crane attached (HMMH)	1
Trailer cargo: LMTV w/topsides	1
Trailer cargo: high mobility 3/4 ton	1
Truck cargo: MTV w/equipment	2
Truck lift fork: DSL driven 10,000 cap 48 inld ctr rough terrain	1
Truck, utility: cargo/troop carrier, 1 1/4-ton 4X4 with equipment (HMMWV)	1
Truck, tractor: 5-ton, 6X6 w/equipment	3
Yoke, towing and lifting collapsible fabric drum: 500 gal capacity	1

Fuel System Supply Point (FSSP)

The FSSP is used to receive bulk fuel from hose line/pipelines, tank cars, tank vehicles, and aircraft to dispense fuel to using units in the field. The FSSP is the principal means of issuing fuel in the combat zone. Fuel enters the fuel system through the 4-inch hose system and is moved to the collapsible tanks by one of the 350-GPM pumps. In some cases, fuel will be moved to the tanks by transporter or through pipeline pumps. When fuel is dispensed, it is pumped from the collapsible tanks through the filter/separators to the vehicles or containers. For more detailed information on the FSSP, see FM 10-67-1.

Equipment. The system consists of two 350-GPM pumps, two filter/separators, six 10,000-gallon collapsible fabric tanks, 11 types of fittings, approximately 1200 feet of discharge hose, and 1200 feet of suction hose, various tools and accessory items for connecting to pipelines, and pumping assemblies for connecting fuel transporters to the fuel system. Because the system is modular, it can be adapted to different terrains and situations. Though designed to handle one type of fuel, the system may be divided to handle two types. The system may be designed so that one tank can receive fuel while a second tank is delivering fuel to dispensing facilities. Design and manifold options are further enhanced by the dual filler/discharge assemblies located catercornered from each other on the tanks. Due to the nature of petroleum, the system is susceptible to enemy action and contamination. Depending on the experience of personnel, it should take eight soldiers approximately four hours to off-load, lay out, and connect the manifolds in the FSSP. (Additional time is necessary for required earthwork.) Eight soldiers are needed each shift to operate the FSSP (Figure 4-7, page 4-40).

Layout. FM 10-67-1 discusses the layout of an FSSP in detail. The FSSP can be changed to a U, V, rectangular, or semicircular arrangement. These are not the only possible arrangements. The unit SOP and mission training plans should provide plans on how the FSSP will be employed. Any unit that can operate the FSSP can develop its own arrangement to meet its needs. However, equipment should be dispersed enough to counter the threat of fire but not to where it is difficult to defend the supply point from the threat of theft and sabotage. When selecting a fuel system supply point site, the section considers cover and concealment, roadnets, dispersion factors, terrain, and site preparation. When a site is chosen, it is prepared by front loader/backhoe, by an engineer unit using scooploaders or armored combat earthmovers (ACE), by civilian labor, or by details from the unit supply section. The site should be sloped from 3 to 6 inches toward both the issuing fill port and manifold end of each collapsible tank. The 10,000-gallon collapsible tanks are required to be at least 40 feet apart. Fire walls around the tanks should be 3 feet high and 18 inches wide at the top. The inside dimensions should be 26 feet by 26 feet. A distance of 3 feet should be maintained from the edge of the tank to the base of the fire wall. The fire wall must be large enough to hold the contents of the tank and one foot of freeboard to contain spills and reduce fire hazards. The chance of sighting by enemy aircraft can be lessened by avoiding rigid geometric patterns. When possible, the layout should be planned to take advantage of shadows caused by natural terrain features. String camouflage nets should cover earth scars caused by fire walls around the tanks. Suggested layouts are in FM 10-67-1.

Displacement Plan. Leapfrogging is commonly used to move fuel system supply points. While half of the fuel remains at the old site to maintain limited service, the other half is moved to the new site. This provides continuity of operations, and fewer vehicles are needed to transport the equipment. Eight soldiers should be able to drain, dismantle, and load the FSSP in approximately four hours. (See Figure 4-8, page 4-41.) Time may vary according to the experience of personnel and the type of terrain. The site should have been initially prepared with a 3 to 6 inch slope toward the issuing fill port and manifold of each collapsible tank. This makes it easier to completely drain the tanks. A forklift truck is needed to load the 350-GPM pumps, filter/separators, and collapsible fabric tanks onto the flatbed semitrailer or 5-ton cargo trucks. The supply control section should have already coordinated for sufficient 5000-gallon semitrailer tankers to receive fuel drained from the FSSP.

FSSP Storage Augmentation. The FSSP can be augmented to increase the storage capability of the petroleum supply company through the use of 20,000- and 50,000-gallon collapsible fabric tanks. With the exception of fire wall dimensions and tank spacing for the 20,000- and 50,000-gallon collapsible tanks, layout and displacement is the same as for the 60,000-gallon FSSP. The 20,000-gallon collapsible fabric tanks must be 40 feet apart; fire walls must be 4 feet high and 18 inches wide at the top. The inside dimensions of the fire wall should be 35 feet long and 31 feet wide. A distance of 3 feet should be maintained from the edge of the tank to the base of the berm. The 50,000-gallon tanks must be at least 150 feet apart, and the fire walls must be 4 feet high and 18 inches wide at the top. The inside dimensions of the fire wall should be 73 feet long and 33 feet wide. Maintain a distance of 4 feet from the edge of the tank to the base of the berm.

50,000-Gallon Collapsible Fabric Tank

The 50,000-gallon collapsible tank is issued as a single item of equipment, not as part of a system. It has a hose and valve assembly to help transfer the product. The assembly consists of a 4-inch, wire-reinforced hose assembly and a 4-inch gate valve. The female end of the 4-inch hose assembly is connected to the 4-inch elbow fitting of the

filler/discharge assembly on the tank. The male end of the hose assembly is coupled to the 4-inch gate valve. The 50,000-gallon collapsible tank is used to store liquid fuels in large quantities for fuel system

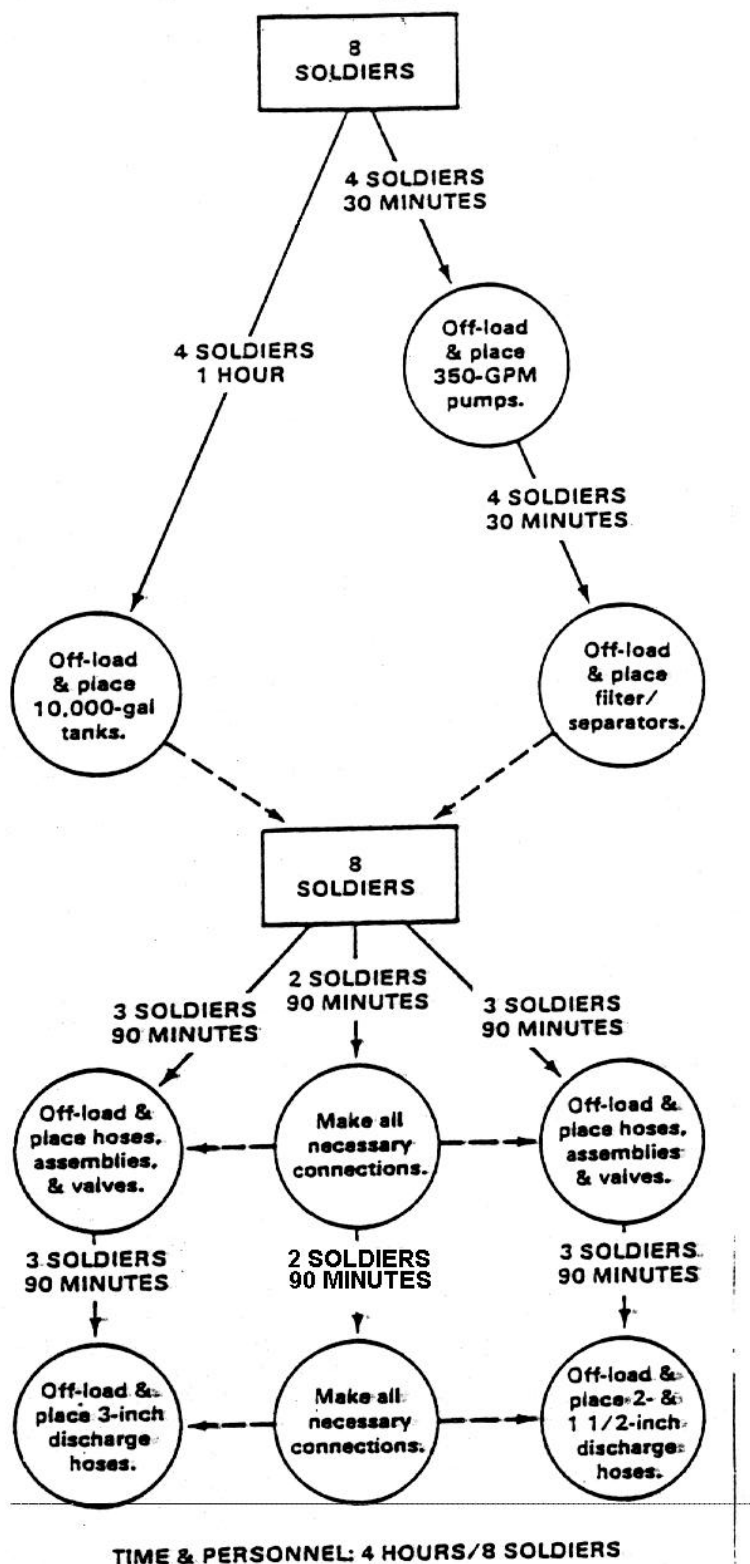


Figure 4-7. Time and personnel requirements to off-load and manifold a FSSP

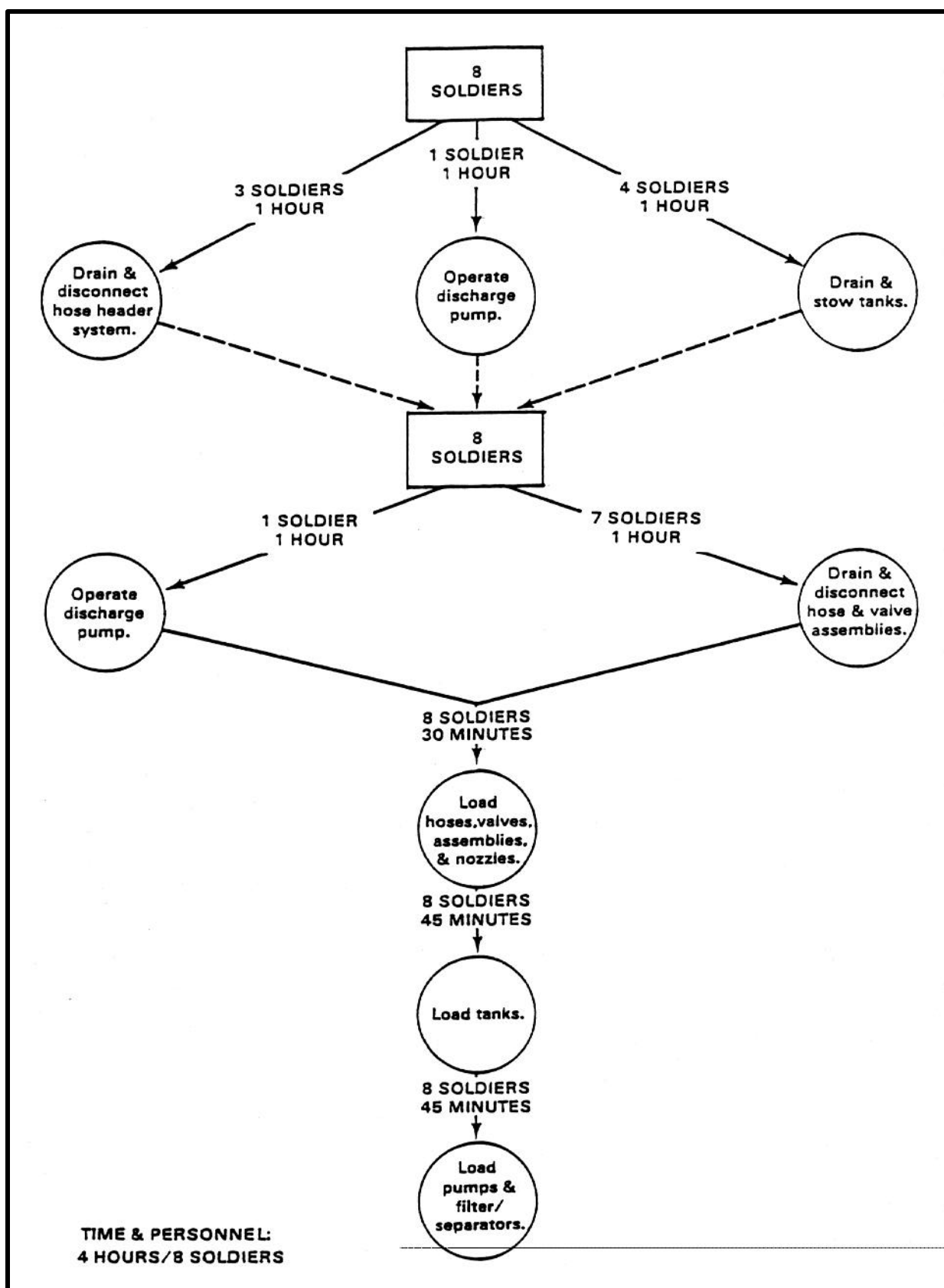


Figure 4-8. Displacement plan for the FSSP

supply point operations and to store a portion of the command reserve stock. The 50,000-gallon tanks give the unit the storage capability to support several divisions. Six 50,000-gallon tanks are allocated to each supply section. These tanks provide maximum flexibility to handle various fuels. Normally there is a minimum of two tanks per product to allow for both receipt and issue of a product at the same time. However, the dual filler/discharge assemblies on the tank allow for both receipt and issue by configuring separate issue and receiving pumps and filter/separators. The type and quantity of fuel stored depends on the types of units supported.

Hose Lines

Hose lines are a quick means of moving large volumes of fuel from pipehead or railhead to inland storage facilities or to high-gallon users such as airfields. The installed hose line system must have proper surveillance to protect against sabotage.

Hose Line Outfit. The initial petroleum distribution system in an undeveloped theater relies primarily on the 4-inch collapsible assault hose line outfit to move bulk fuel. The outfit consists of

- 13,000 feet (about 2.5 miles) of 4-inch collapsible hose packed in flaking boxes.
- 350-GPM pumping assembly.
- Flow-control kit.
- Regulator assembly kit.
- Roadway crossing guard.
- Hose line suspension kit.
- Hose line displacement and evacuation kit.
- Sling assembly.
- Hose line packing kit.
- Repair kit.

The 350-GPM pumping assembly is a separate item of equipment. Each section is equipped with one hose line outfit. The laying and operation of the hose line can be performed by a minimum of three persons (one driver, one flaking box monitor, and one person walking behind the truck straightening bends and kinks).

Packaging. The hose is packed in 13 flaking boxes, 1000 feet per box. Each 1000-foot section consists of two 500-foot lengths joined together with an aluminum grooved coupling. A swivel joint with grooved ends is attached to one end of the assembly. This lets the hose assembly rotate continuously at the swivel connection. Three to five full flaking boxes are usually carried on a truck, but this depends on the type of truck and the terrain the truck must cross to lay the hose line. The special sling assembly is used for lifting as many as three flaking boxes at a time onto the transporting vehicle.

Route Selection. A direct route free of obstacles should be chosen for the hose line. The route should be parallel to an existing or planned road to aid in construction, patrol, operations, and security of the line. A route next to a secondary all-weather road is better than one next to a main supply route. All natural concealment, such as hedgerows, fence lines, and woods, should be used. Difficult terrain, such as populated areas, marshes, swamps, and land subject to flooding, should be avoided.

Section VII. MAINTENANCE SECTION

MISSION

The maintenance section provides the personnel and equipment to perform unit maintenance required for generators, MHE, construction and engineer equipment, wheeled vehicles, and quartermaster special-purpose equipment for the petroleum supply company. The maintenance section also provides limited vehicle recovery support.

PERSONNEL

Table 4-13 lists maintenance section personnel and their duties.

Table 4-13. Duties of Maintenance Section Personnel

POSITION	SC/ MOS	SKILL LEVEL	GRADE	TOTAL	DUTIES
Unit Maintenance Technician	915A		W2	1	Plans, supervises, and directs the unit maintenance of all organic equipment of the petroleum supply company. Keeps the commander and staff members advised of the maintenance material readiness situation.
Motor Sergeant	63B	5	E8	1	Assists the unit maintenance technician in the supervision of all maintenance functions. Directly responsible for the supervision of motor maintenance and supporting personnel. Applies production and quality control principles and procedures to maintenance operations. Prepares informal daily work assignment sheet, listing priorities, tasks, mechanics, area cleanup responsibilities, and special requirements for such items as tools, parts, and lubricants. Monitors use of hand and power tools. Responsible for security of tools. Conducts informal spot-check inspections. Enforces safety procedures. Supervises recovery operations. Performs administrative duties.
Senior Mechanic	63B	3	E6	1	Performs light wheeled vehicle mechanic duties, performs heavy wheeled vehicle mechanic duties, supervises lower-ranking soldiers, and provides technical guidance to the soldiers of the maintenance section. Supervises unit maintenance on wheeled vehicles, materials-handling equipment, power generation equipment and upkeep of hand and power tools. Performs battlefield damage assessment and repair (BDAR). Supervises recovery operations.
Construction Equipment Repairer	62B	2 1	E5 E4 E3	1 1 1	Performs unit maintenance on construction equipment (crane and bulldozer), air compressors, and pneumatic tools. Inspects traction suspension, booms, and blades. Inspects clutches and brakes for wear, alignment, and slippage. Replaces starters, generators/alternators, spark plugs, carburetors, fuel pumps, radiators, fans, hoses, and belts. If needed, serves as a welder. E5 supervises lower-grade soldiers and provides technical guidance to soldiers. E3 also serves as a light wheeled vehicle driver.

Table 4-13. Duties of Maintenance Section Personnel (Continued)

POSITION	SC/ MOS	SKILL LEVEL	GRADE	TOTAL	DUTIES
Light Wheeled Vehicle Mechanic	63B	2 1	E5 E4 E3	2 2 3	Performs unit maintenance on the company's organic vehicles and equipment. Maintains power-assisted brake systems, wheeled vehicle suspension systems, wheel/hub assemblies, mechanical and hydraulic steering systems, and wheeled vehicle crane/hoist/winch assemblies. Records maintenance on DA Form 2402. Maintain tools and test equipment. The E5 also supervises lower-grade soldiers and provides technical guidance to them. The E3 light wheeled vehicle mechanics also drive the 5-ton cargo truck when required.
QM & Chem Equipment Repairer	63J	2 1	E5 E4 E3	2 2 3	Performs unit maintenance on quartermaster equipment, including fuel system supply point elements (350-GPM pumps, filter/separators), tank and pump unit, field ranges, immersion heaters, space heaters, and tents. Disassembles, inspects, and replaces equipment components. Lubricates equipment. Records maintenance on DA Form 2402. Maintains tools and test equipment. The E5 also supervises lower-grade soldiers and provides technical guidance to them.
Heavy Wheeled Vehicle Mechanic	63S	2 1	E5 E3	1 4	Performs unit maintenance on company materials-handling equipment. Assists light wheeled vehicle mechanics when required. The E5 also supervises lower-grade soldiers and provides technical guidance to them.
Welder	44B	1	E4	1	Operates and performs preventive maintenance on the welder's tool kit and cutting and welding torch outfit.
Power Generator Equipment Repairer	52D	1	E4	1	Performs unit maintenance on company generators.
Recovery Vehicle Operator	63S	1H8	E4	1	Operates the 5-ton wrecker used to recover disabled organic vehicles and equipment. Also operates radio when required.
Equipment Records & Parts Specialist	92A	1	E4 E3	1 1	Assists the unit maintenance technician in maintaining equipment maintenance records and schedules for organic vehicles and equipment as required by The Army Maintenance Management System (TAMMS). Maintains stock locator system and administers document control procedures. Performs prescribed load list (PLL) and shop stock list (SSL) duties in manual and automated supply applications. Requests, receives, and stores all repair parts and reference publications to support mechanics performing unit maintenance. Prepares maintenance reports and schedules vehicles for maintenance. Performs dispatching procedures using manual and automated systems. Also serves as radio operator and drives light vehicle when required.
Petroleum Light Vehicle Operator	77F	1H7	E3	1	Operates and drives fuel tank truck. Fuels and services vehicles and equipment.

EQUIPMENT

Table 4-14 lists equipment necessary for completion of the maintenance section mission as prescribed by TOE 10427L.

Table 4-14. TOE Equipment List for the Maintenance Section

ITEM	QUANTITY
Cable telephone: WD-1/TT DR-8 1/2 km	2
Camouflage screen support system: woodland/desert, plastic poles	25
Camouflage screen system: woodland lightweight, radar scattering, without support system	25
Charger battery: PP-34/MSM	1
Cleaner, steam pressure jet: with steam engine base mounted 100psi	1
Generator set: ded skid mounted, 10kw 60 Hz	1
Generator set: ded skid mounted, 3kw 60 Hz	1
Compressor unit, reciprocating: truck, 2-wh, pneumatic tires, gasoline-driven, 5 CFM, ps75	1
Data transfer device: AN/CYZ 10	2
Distribution system electrical: 120 vph 60 amp	2
Dispensing pump, hand driven: hose-nozzle discharge adjust range	1
Installation kit: MK-2195/VRC for AN/VRC-87/88/90 in 2-1/2 and 5-ton	1
Installation kit: MK-2325/VRC for AN VRC -87/88/90 in HMMWV	1
Heater duct type, PTBL: 1200-00 BTUs	1
Hose assembly: nonmetallic, fuel/oil hydrocarbon	4
Jack dolly type, hydraulic: 10-ton capacity	2
Lubricat-serv unit, power operated: trailer mounted, 15 CFM air comp, gas driven	1
Multimeter, digital: AN/PSM-45	1
Night vision goggle: AN/PVS-7B	6
Reeling machine, cable hand: RL-39	1
Radio set: AN/VRC-90A	2
Truck wrecker: tactical 8x8 heavy expanded mobility with winch	1
Truck utility: Cargo/troop carrier 1-1/4 ton, 4X4 w/E (HMMWV)	2
Trailer flatbed: 5-ton, 4 wheel, general purpose	1
Test set electronic systems: AN/PSM-80(v)2	1
Truck tank: POL MTV with equipment	1
Tank unit, liquid dispensing trailer mounting	1
Telephone set: TA-312/PT	2
Tent: Frame type, maintenance, medium, light metal cotton duck OD	1
Utility receptacle	2
Shop equipment automaint and repair: OM common No 1 less power	1
Shop equipment automaint and repair: org supply No 1 less power	1
Tool kit, general mechanics: automotive	25
Tool kit welders	1
Tool set, vehicle, full tracked: org maint supply No 2 less power	1
Torch outfit, cutting and welding: org maint set No 5	1
Trailer cargo: 3/4 ton 2 wheel with equipment	1
Trailer cargo: MTV with drop sides	1
Truck, cargo: 4x4 LMTV with equipment	1
Truck cargo: 4x4 LMTV with equipment with winch	1
Trailer cargo: LMTV with drop sides	1
Wrench impact pneumatic: 3/4 inch diameter max rated thread size	1
Wrench set socket: square drive 3/4 inch across flats hex type sockets	1

OPERATIONS

Because the petroleum supply company distributes bulk petroleum throughout the theater of operations, its supply sections may be widely scattered. Since this company does not have enough vehicles to transport items to the maintenance area for repair, it must train maintenance teams to perform on-site maintenance. These teams may include QM equipment repairers, power generation equipment repairers, and wheeled vehicle mechanics. The 1 1/4-ton cargo truck and 3/4-ton cargo trailer have been allocated to transport personnel, equipment, and repair parts for on-site maintenance. With personnel performing maintenance at distant sites as well as in the maintenance area, efficient scheduling is crucial. The motor sergeant may need to reschedule maintenance services to enable mechanics to repair malfunctions reported by equipment operators on DA Form 2404. The motor sergeant must schedule maintenance to keep personnel working at or near capacity. To do so, he needs to know maintenance personnel duties, equipment capabilities, and typical repair times. The sergeant must schedule the sequence of repairs around the availability of parts. This means understanding the repair parts request system and request times.

Setup and Closedown

Site setup and closedown are important and complicated. Field situations seldom afford ideal conditions. However, the area selected for maintenance should be centrally located, be on or near a good road, provide concealment, be easy to secure, and be relatively hard and well-drained.

Setup. See FM 55-30 for information on setting up a tactical motor pool. Setting up the maintenance element in the field involves developing a layout plan (Figure 4-9), pitching tents, positioning equipment in the tents, and organizing for maintenance operations and repair parts issue.

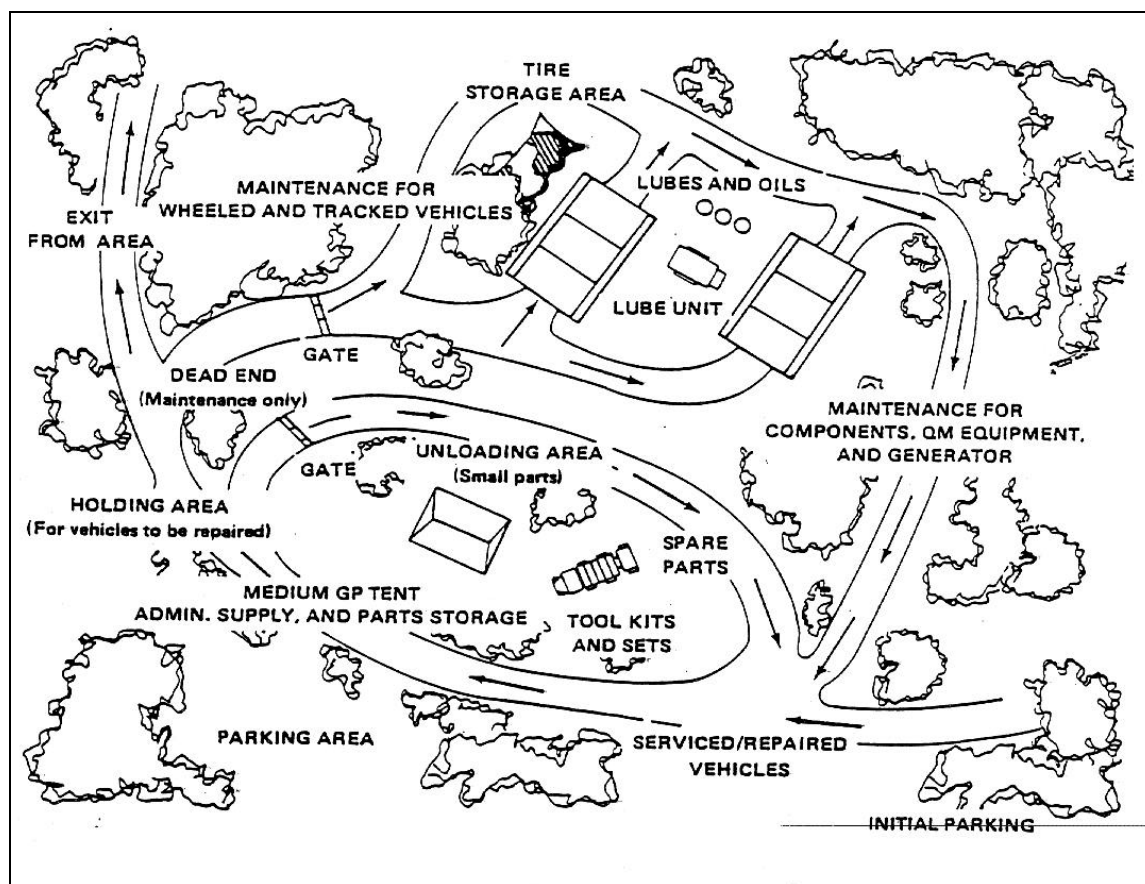


Figure 4-9. Sample maintenance section layout

Closedown. When the unit has to move, the commander issues a warning order telling when to close down and prepare to move. When planning for the move, the following should be evaluated:

- By what date must the unit be ready to move?
- What types of operations are expected?
- How many soldiers will move to the new area?
- Will some soldiers continue to operate at the old area?
- When will equipment be deployed?
- Is special maintenance required for equipment before or on arrival in the new area?
- Will advance elements require any special maintenance support?
- What are climate and terrain like in the new area?

Unit Maintenance

Soldiers should not perform maintenance beyond their capabilities. Deficiencies discovered before, during, and after operation that are beyond the operator's capability become the responsibility of unit mechanics. They perform maintenance services on equipment and repair items sent to them. When they cannot repair items, they send them to

DS maintenance. Mechanics should use technical manuals for the equipment when performing quarterly maintenance services and troubleshooting. They also use DA Form 2404, just as the operator does, to note any defects they find. If the mechanics cannot correct the defects and must send the equipment to DS maintenance, they note that on the form. Once the DS maintenance activity completes the work, DA Form 2407, showing the hours of labor, parts, and other materials used and the cost of repairs, is sent back to the unit.

Repair Parts

The maintenance section is authorized a PLL to support daily maintenance operations. Usually, this is for a specific number of days' supply, based on the average customer wait time. The unit commander approves the PLL. The motor sergeant supervises the PLL clerk and makes sure the list is set up and maintained according to DA Pam 710-2-1 (TMs in the 38-L32 series, if the unit is automated).

Mandatory Parts List. Consolidated MPLs list repair parts required for use on combat-essential equipment. The unit commander should check that there is an MPL for each on-hand end item identified in the Mission Profile Development List for the unit. Additional MPLs can be requested according to DA Pam 710-2-1. The commander should also check the mandatory stockage quantity and update the PLL records according to DA Pam 710-2-1.

Repair Parts Requests. The PLL clerk makes requests for parts. The average maximum lead time for requested items must be known to ensure requests are submitted in a timely manner. Daily requests will prevent an accumulation and help ensure continuous supply. Procedures should be specified for establishing PLL levels, for using priority designators, for requesting follow-ups, and for reporting delays.

Tool Maintenance and Accountability

The motor sergeant establishes an effective tool control system and inventories tools regularly. Lost, damaged, or destroyed tools must be accounted for and replaced according to AR 735-5. See TM 9-243 for details on tool use and care. DA Pam 710-2-1 has toolroom procedures. The section is authorized a set of common tools and equipment. The set is usually mounted on a secured vehicle. One side of the vehicle can be used for storing tools and test equipment, and the other side can be used to store key repair parts. This setup helps soldiers find the tools they need quickly and speeds on-site repair. A tool keeper is assigned to maintain a tool sign-out register. Equipment is returned at the close of each working day. Each mechanic is issued an automotive tool kit on a hand receipt. Each mechanic is responsible for ensuring that assigned tools are properly maintained and stored when not in use. A secure tool storage area should be set up.

The Army Maintenance Management System

TAMMS is the key to good maintenance management. TAMMS records give the commander the data needed to manage equipment resources. These records enable him to evaluate modification work orders, repair parts requirements, material readiness, and support requirements. They help him evaluate equipment operation, including availability, deficiencies, and failure frequency. DA Pam 738-750 contains specific instructions on the preparation and use of maintenance system forms. The three types of records are operational, maintenance, and historical. Operational records are used to control operators and equipment, to plan for maintenance operations, and to make best use of equipment. Maintenance records control maintenance scheduling, inspection procedures, and repair work loads. They also provide a uniform method for recording corrective actions. They are used to determine equipment readiness and reliability and to determine use and logistical requirements. Historical records document permanently the receipt, operation, maintenance, and disposal of equipment.

Unit-Level Logistics System ~~in~~ Ground

ULLS-G provides supervisory control and flexibility to maintenance operations. ULLS expedites repair parts supply and maintenance functions at the lowest level. ULLS also communicates with other systems by magnetic media (diskette) transfer or telecommunications. Also incorporated into ULLS is the Army Material Status System (AMSS), which replaces the manual reporting requirements in AR 700-138. ULLS performs many jobs for the unit with little

input from the operator. When the clerk orders repair parts, ULLS edits the request, updates the document control register, and provides information to update the deadline. ULLS edits transactions using an internal catalog and information provided in the equipment data file. When the clerk issues a part from the PLL, ULLS makes, computes, and generates a replenishment requisition. ULLS is divided into three major areas: Class IX supply, maintenance, and utilities or files maintenance. ULLS supply data is sent to the supply support activity at the DSU level. Data is then forwarded to the DS4 level. ULLS speeds up supply and maintenance operations at the unit level while eliminating errors that could occur under a manual operation. It allows supervisory control of the system with passwords, user identification codes, and the commander's exception report. When ULLS is not available or operative, the unit may use manual procedures in an emergency. For procedures and frequency of ULLS application, see Table 4-15.

Dispatch

Dispatch procedures apply to vehicles, generators, forklifts, and engineer equipment. They also apply to other items the commander may designate.

- **Before Mission.** The operator contacts the dispatcher with a vehicle requirement. A vehicle is designated. The operator performs a before-operation check using the appropriate technical manual and DA Form 2404. If he finds any deficiencies, they are either corrected or another vehicle is designated. The operator documents the discrepancies on DA Form 2404. The dispatcher uses DA Form 2401 and DA Form 1970 to dispatch the vehicle to the operator.
- **During Mission.** The operator performs during-operation checks. The operator knows that any maintenance problems found during these checks should be reported at once, if possible, and recorded on performance records for the equipment.
- **After Mission.** The operator tops off the fuel, performs after-operation checks, and makes appropriate entries on DA Form 2404. The operator then returns the DA Form 2404 and DD Form 1970 to the dispatcher. The dispatcher reviews the entries and posts the mileage or hours. He then enters the time of return to close out the DA Form 2401 entry for that item.

Table 4-15. Operator/Supervisor Working Matrix

PROCEDURE	DAILY	WEEKLY	MONTHLY
Dispatch vehicles	X		
Process received/installed parts	X		
Requisition parts:	X		
1. Review AMSS reports	X		
2. Verify information (NSN, part number, etc.)	X		
3. Check PLL	X		
4. Enter part data	X		
5. Run commander's exception report	X		
6. Process requisitions through OSC	X		
7. Review OSC transactions	X		
8. Turn in/maint/supply diskette	X		
9. Process maint/supply status	X		
Review NMC report and maintenance request register	X		
Review next day dispatch requests	X		
Back up data files	X		

Provide commander w/NMC report and maintenance request register		X	
Run zero balance report (verify requisition status)		X	
Review document control register (update)		X	
Provide commander AMSS reports		X	
Review excess management report and process excess for turn in		X	
Update Class IX catalog		X	
Review PLL inventory report and inventory			X
Review demand analysis report and make required changes			X
Provide commander service scheduled listing			X

Recovery and Evacuation

It may become necessary to recover equipment that becomes disabled in a location away from the motor pool. If soldiers are unable to repair disabled equipment, it should be evacuated and serviced elsewhere.

- **Recovery.** Technical manuals should be consulted for the weight of the item and for other necessary data to prepare for recovery. The area should be reconnoitered to determine the best method of anchoring the wrecker. FM 9-43-2 discusses various types of ground anchors, equipment needed, safety precautions, and records for computing equipment capacities. FM 21-305 provides each vehicle driver with vehicle recovery and field expedient information. Each driver should have a copy of FM 21-305. The maintenance SOP standardizes signals between wrecker and winch operators. If an item is so contaminated that it cannot be recovered, the section contacts the higher headquarters for advice and assistance.

- **Evacuation.** If a unit cannot recover an equipment item, it notifies the supporting maintenance activity and requests evacuation. It tells the maintenance activity the type of equipment and its location. If the situation allows, a crew member should remain with the equipment until it is picked up by the supporting activity.